G 12 FOCUS: - MAKE FINAL SETTING WITH RED NOS. DECREASING

1

- FOR CENTRE TO VIOLET, CORRECT BY INCREASING RED NOS.
- DECREASING TEMP WILL CAUSE CENTRE TO VIOLET
- 50 DIVISIONS = SHIFT OF 21 MICRONS ON PLATE
  = MOVEMENT OF CAMERA 6×10^{-3} INCHES

TYPICAL FOCUS: 90-R (WINTER) — 5-R (SUMMER)

G40 FOCUS:

me Temp. .....

cus .....

me Temp. .....

Transparency Conditions .....

ur Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
								David Dunlap Observatory	
								74" logbook	
								Vol. 42	
								Plate Nos. 33384-34450	

Quality

FINE

FINE

FINE

FINE

NE

INE

VIDING

INE

VIDING

NE

NE

E

Eprint

E

Red

5

Date July 15-16 Wed-Thurs. 1970 Observer Gu - R. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
33384	i Ser	$15^h 37^m 5^s$	+20° 0'	G12	IIa O	9L		23:18	23:30	A
33385	HD 157087	17 16.5	+25° 38'	G12	IIa O	9L	76°F	23:37	23:51	B
33386	72 Oph	$18^h 2^m 37^s$	+09° 33	"	"	"	75°F	00:04	00:09	C
33387	111 Her	$18^h 42^m 36'$	+18° 04'	"	"	"		00:17	00:25	A
33388	ν Cap ("nu")	20 15m 7s	−13° 04	"	"	"	74°F	00:32	00:44	B
33389	δ Del	20 30 38	+14° 20'	"	"	"		00:53	01:01	C
33390	θ Cep	20 27 54	+62° 39	"	"	"	73°F	01:13	01:20	A
33391	i And	$23^h 33^m 14^s$	+42° 43'	"	"	"	73°F	01:31	01:39	B
33392	δ Del	20 30 38	+14° 20'	"	"	"		01:55	02:06	C
~~33393~~	~~107 Aql~~	~~23 40 49~~	~~−19° 14'~~	"	"	"	~~72°F~~			A
33393	HD 183914	19 26.7	+27 40	"	"	"	72°F	02:52	3:08	A
33394	HD 212097	22 16.7	+27 50					03:20	03:30	B
33394F1	focus test	extra/w		G12	IIa O	9	70°F			B
33394T1	calibration	step wedge	for	IIa O	plates	#	33384 - 33388, 33391 - 33395			
33394T2	"	"	"	"	"		33381 - 33383, 33389, 33390			

Dome Temp. 72°F H76%

Focus 20-R

Dome Temp. 67°F H79%

Transparency Conditions very hazy clear up at about 0000

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3h 7m W	+19° 50'	3s	4.52	A1V	17-17-17	Gw Pros.	80/40		FINE
1h 54m W	+35° 37'	3s	5.30	M3III	17-17-17	Gw Pros	80/40		FINE
1h 20m W	+09° 38'	2s	3.73	A4III	17-17-17	" "	80/40		FINE
0h 56m W	+18° 11	2	4.30	A5III	17-17-17	" "	80/40		FINE
0h 17m E	-1° 46	3	4.75	B9V	17-17-17	" "	80/40		FINE
0h 15m E	+14° 37	3	4.67	A3V	17-17-17	" "	80/40	BROKEN 3 PIECES	FINE
0h 07m W	+6° 65	2	4.20	A7III	17-17-17	" "	80/40	" 2 PIECES	GUIDING FINE
2h 40m E	+43° 09	2	4.28	B8V	17-17-17		80/40		SL. GUIDING FINE
0h 49m W	+14° 39'	2	4.67	A3V	17-17-17	" "	80/40		FINE
			~~5.74~~	~~F0III~~			~~200/120~~	could find star	
2h 59m N	+27° 58'	3	5.34	B9	12-12-12	Comp. Pros.	200/100		FINE
0h 26m W	+28° 15	3	4.83	B8	12-12-12	" "	80/40		Fingerprint FINE
					7-7 no filter				C, to Red
MWP. 2/9.0 mm @			68°F		July 16 1970				
"			"		"				

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THUR-FRI

Date July 16/17 1970 **Observer** Hd-McM-Ri **Julian Day**

Done Temp. 67
Focus
Done Temp. 61

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33395	HD180555	19 11.9	+14 23	G-12	IIaO	9L	70°F	20 51	21:09	A	2H45E
33396	HD189090	19 53.2	+16 31	"	"	"	69°F	21 15	21:34	B	3H03E
33397	HD 183914	19 26.7	+27 40	"	"	"	69°F	21 39	21 55	C	2H14E
33398	HD 183227	19 23.4	+2 43	"	"	"	68°F	22 03	22:28	D	1H38E
33399	HD 196426	20 32.2	−0 15	"	"	"	67°F	22 34	23 04	C	2 11E
33400	"	"	"	"	"	"	67 F.	23 11	23 44	B	01 31E
33401	HD 200340	20 57.8	−01° 19	"	"	"	66°F	23:57	0 35	D	1 05E
33402	HD 198667	20 46.8	−05 52	"	"	"	66°F	0 40	1 01	A	0 29E
33403	HD 212097	22 16.7	+27 50	"	"	"	65°F	1 06	1 14	B	1 45E
33404	HD 213998	22 30.2	−0 38	"	"	"	64F	1 18	1 25	C	1 48E
33405	"	"	"	"	"	"	64F	1 26	1 33	A	01 40E
33406	HD 223094	23 41.5	+28° 09		IIaO B	13 5	63F	01 42	02 31	C	01 52E
33407	HD 4388	00 41.1	+30° 35	"	IIaO B	"	63F	02:38	03 35	B	01 49E
33408	HD 213998	22 30.2	−0 38	"	IIaO	"	63F	03 39	03 44	A	00 32W
33408F	focus test		out/in in	"	IIaO	9	63F			C	
33408T1	calibration	step Wedge for IIaO plates # 33396-33405, 33408									

Dome Temp. 67°F H 64%

Transparency Conditions some haze, photometric after 9200

Focus .....

Dome Temp. 61°F H 74%

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Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2H45E	+14 32	2"	5.46	A0	12-12-12	Comp. Prog	200/100		FINE
3H03E		2"	5.56	B9	12-12-12	comp prog	200/100	BROKEN 2 PCS.	FINE
2"14E	+27 56!	2"	5.34	B9	12-12-12	" "	200/100	we took faint comp of dbl, though there is confusion in HDE	field uncon. BD FINE
14 38E	+02°57'	2"	5.92	B9	12-12-12	" "	200/100		GUIDING FINE
2 11 E.	+00°04'	2"	6.11	B8	12-12-12	" "	200/100		SL GUIDING FINE
01 37E	+00° 04'	2"	"	"	6-12-12	" "	200/100		FINE
1 05E.	-01°01'	2"	6.26	B8	12-12-12	" "	200/100		SL GUIDING FINE
0 29E.	-05° 34'	2"	5.45	B8	12-12-12	" "	200/100.		FINE
1 45E.	+28° 14'	2"	4.83	B8	12-12-12	" "	200/100.		FINE
1 48E.	-00° 11'	2"	4.08	B8	12-12-12	" "	200/100.		FINE
01 40E	-00°11'	2"	"	"	12 12-12	" "	200/100		FINE
01 52E	+28° 36'	2"	8.97	K5III	6-6-6-6-6-6	8a. Std. Vel.	800/320	baked plate right side of box	
01 49E	+30° 52'	2"	8.80	K3III	6-6-6-6-6-6	" " "	800/320	N component of pair	
00 32W	-00° 15'	2"	4.08	B8	18-18	comp prog	200/100		STRONG
					7-7	100 filter			ok.

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Tues-Wed

Public night Elgrac July 18/19
95(2) → 65(2)

Date July 21/22 **Observer** West, Hd, Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33409	HD 183914	19 26.7	27 40	G12	IIaO	9L	67°F	21 10	21:32	A
33410	HD 183227	19 23.4	+02 43	"	"	"	64°F	21:40	22:16	B
33411	HD 187691	19 46.2	+10 10	"	"	"	"	22 24	23:04	C
33412	ADS 14893	1970 21 20.7	1970 +10 12	"	"	"	61°F	23:20[80]	00:40	A
33413	"	"	"	"	"	"		00:45[76]	02:01	B
33414	"	"	"	"	"	"	59°F	02:03	03:13	C
33415	L PISCIUM	1970 23 38.4	1970 +05° 28'	"	"	"		03:22[10]	03:32	A
33416	ε CETI	1970 02 38.1	1970 −11° 58'	"	"	"		03:40	03:58	B
33416F	Focus			"	"	9	57°F			B
33416 T1	calibration step wedge for plates 33409-33416								22 July 1970	
	411 - 416 REMOVED BY DR. WEST									

Dome Temp. 62
Focus
Dome Temp. 55

Hour Angle End	
02 16E	+4
1 36E	+0
01 05E	+1
00 59E	+1
00 21W	
01 34W	+1
00 25E	+0
00 06E	−1
4 min / ov	
2 WP-1/ga	

Dome Temp. 62°F H=60% Transparency Conditions very good

Focus .....

Dome Temp. 55°F H=63% Delayed by Exmeter trouble

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
32	A	02 16E	+27 54	2	5.34	B9	12-12-12	Comp.	unsuccessfully.		STRONG
16	B	1 30E	+02 55	2-3"	5.92	B9	12-12-12	"	"		SL. STR.
04	C	01 05E	+10° 24'	2"	5.8	F8	12-12-12	Std vel.	"		SL. STR
40	A	00 59E	+10 17	2-3"	Vis 6.75	F8V	12-12-12	Spec Bin	"	maybe strong Fe closely guided	FINE
01	B	00 21W	"	"	"	"	12-12-12	"	"	Finder Fld drown spot guided	
134	C	01 34W	+10° 16'	"	"	"	12-12-12	"	"	"	BROKEN
32	A	00 25E	+05° 32'	2"	Vis 4.3	F8	18-18	std vel	"	broken 2pc	SL. Wk
58	B	03:00E	-11 55'	3"	Vis 4.3	F5	18-18		"		BROKEN * SL. STR
	B	in in / out out					7/7	no filter			
										* ACCIDENT DURING PROCESSING	
17		2 WP. 2/9.0 min @ 68°F				(2 to 1.59)					
								Anson - Could you develop those as early as possible. ie Dr West wants to take them in the afternoon - Tn ✓			
								EX. MTR Repaired July 22/70 thr			

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Date July 22/23 WED/THUR **Observer** Faubert - Tx - Gallivan **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33417	HD158704	$17^h 25^m.6$	-26° 11'	G12	IIa O	9L	70°F	20:45	21:41	A
33418	HD134305	15 040	+12° 52'	"	"	"	70°F	21:56	23:08	B
33419	HD176938	18^h 57.5	+29° 23'	G12	IIa O	9L	"	23:20	23:44	C
33420	HD 178947	$19^h 05^m.5$	+30° 24'	"	"	"	69°F	23:57	00:37	C
33421	HD 179838	19 09.0	+29° 03'	"	"	"	68°F	00:43	01:37	A
33422	HD 189597	19^h 57.0	+30° 57'	"	"	"		01:50	02:35	B
33423	Blind (HD 6860)	$01^h 08^m.0$	+35° 04'	"	"	"		02:51	02:55	C
~~33424~~	~~Col: Mira~~	~~$02^h 14^m.3$~~	~~-3 26'~~	"	"	"		~~03:~~		D
33423F	Focus			"	"	9	67°F			B
33 423 T1	calibration step wedge for plate 33417 - 33423								23 July/Th	

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. 66 H-57%

Focus 20-K

Dome Temp. 63°F H-70%

Transparency Conditions Excellent
cloud at 01:30

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
91	E	$0^h 05^m$ E	-26° 11′	3″	6.01	B9	17-17-17	Gu Ap *	200/100	posibly fog & the loose cable(es) also broken 1"end → NO FOG	(GUIDING) SL. WK
8	F	$03^h 47^m$ W	+12° 38′	2″	7.24	A3	17-17-17	"	400/200		SL. WK
4	H	$00^h 28^m$ N	+29° 31′	3″	6.64	A0	17-17-17	"	400/200		(GUIDING) FINE
7	C	01′ 12″ W	+30° 34′	"	6.66	B9	17-17-17	"	200/100		(GUIDING) FINE
7	A	$00^h 12^m$ N	+29° 14′	2″	6.93	A0	17-17-17	"	200/100	thin cloud	POOR GUIDING FINE
	B	$02^h 20^m$ N	+31° 12′	"	6.66	B8	17-17-17	"	200/100	"	(GUIDING) SL. STR
	C	$02^h 28^m$ E	+35° 30′	2-	2.37	M0 III	18-18	G1001 - Faubert	20/19		(GUIDING) FINE
						M6	18	" "	200/	cloud, gave up	
	B						7/7	no filter			VERY SLIGHT CENTRA TO RED
		2 WP-2 / 9.0 min @ 61° F / 29.91 IN									

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Date 1970 July 23/24 Tour F21 **Observer** Hd-In-McK **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33424	HD187090	19 53.2	+16 31	G-2	IIaO	9L	73°F	20 39	21 13	A
33425	HD 171391	18 29.5	−11 03	"	"	9L	71°F	21 21	21 51	B
33426	HD 196426	20 32.2	−00 15	"	"	"	71°F	21 59	22 31	C
33427	"	"	"	"	"	"	70°F	22 34	23 10	A
33428	HD 198667	20 46.8	−5 52	"	"	"	70°F	23 16	23 36	B
33429	HD 171391	18 29.5	−11 03	"	"	13G	69°F	23 46	23 58	C
33430	HD 200240	20 57.8	−01 19	"	"	9L	69°F	00 06	00 50	A
33431	"	"	"	"	"	9L	68°F	01 46	02 36	C
33432	HD 213998	22 30.2	−00 38	"	"	"	67°F	02 40	02 44	A
33433	HD 212097	22 16.7	+27 50	"	"	"	"	02 52	02 58	B
33434	HD 176318	18 54.6	+38 07	"	"	"	"	03 06	03 30	C
33434F	Focus			"	"	9	66°F			B
33434 T1	calibration slap wedge for plates 33424 - 33434								24 July 70	

Dome Temp.
Focus
Dome Temp.

Hour Angle East	
2h 56.2	
10 53E	
2 h 3	
01 37	
01 25E	
01 [illegible]	
00 23E	
01 27 W	
00 31E	
00 27W	
04 21W	

Dome Temp. 68°F H-60%

Focus 20-R

Dome Temp. 63°F H=75%

Transparency Conditions ..... scattered cloud .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2^56 E	+16° 47'	2"	5.36	B9	12-12-12	Comp Prog	200/99	light clouds	(FINE)
00 54 E	-10° 54'	"	5.2	gG7	12-12-12	Std Vel.	200/130		FINE
2 16 E	+00° 05'	"	6.1	B8	12-12-12	Comp Prog	200/100		(FINE)
21 39 E	"	2"	"	"	12-12-12	"	200/100	some clouds	(FINE)
01 25E	-5 31.	2"	5.45	B8	12-12-12	"	200/100		FINE
01 14W	-10° 57'	3"	5.2	gG7	12-12-12	Std Vel	200/80		FINE
00 23E	-00° 59'	"	6.26	B8	12-12-12	COMP. PROG	200/100	some cloud, thick	FINE
01 23W	-00° 58'	2-3"	"	"	12-12-12	"	200/100	Clear by 02^h	FINE
00 01E	-00° 12'	2"	4.08	B8	18-18	"	40/18		FINE
00 27W	+28° 13'	2"	4.83	B8	18-18	"	40/19	completes Comp Prog	FINE
04 21W	+38 16	2-3"	5.7	B6-7	12-12-12	[illegible]	200/100		FINE
	in in / out out				7/7	no filter			GOOD
	NWP-2 / 9.0 min	@ 66°F / 24°C							

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Date 1970 July 24/25 Fri-Sat Observer Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33435	HD 139892	15 35.6	+36 58	G12	IIaO	9L	73°F	20:45	21:07	A
33436	HD 187929	19 47.4	+00° 44.9	"	"	"	72°F	23:14	23:28	C
33437	T Vul HD 198726	20 47.2	+27°52.5	"	"	"	71°F	23:35	00:15	A
33438	HD 213947	22 29.9	+26 05	"	IIaOb	13s		00:24	01:00	B
33438F	Focus			G12	IIaO	13	71°F			B

Dome Temp. 70
Focus 20
Dome Temp. 6

Hour Angle End

Dome Temp. 70°F H = 80%

Focus 20 R

Dome Temp. 68°F H = 92%

Transparency Conditions very hazy scattered cloud
+thick cloud by 21h
much better by 00:30

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Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
07	A	01 20W	+36° 47′	3"	5.1	B8n	12-12-12	Sp Bin	200/90	some cloud -	
28	C	00 31 E	+01° 01′	2"-3"	4.08-5.25	F6Ib-G4Ib	12-12-12	Cepheid	200/125	very hazy	FINE
15	A	00 43 E	+28° 12′	1"-3"	6.82-6.82	F5Ib-G0Ib	12-12-12	"	200/130	"	GUIDING FINE
00	B	01 40 E	+26° 30′	1"-2"	8.93	K4III	6-6-6 18	SS V	800/160	F.K. Brown complete cloud	WEAK
										Fog like soup	
	B	[illegible]					7/7	no filter			C TO R
										Closed 01 30	

Date 1970 July 25/26 Sat-Sun **Observer** She-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33139	AG 10°33	19 31.0	+28 52	G12	IIaOb	13s	75°F	22:47	02:11	A	0.77W
33140	HD 4358	00 41.1	+30 25	"	IIaOb	"	72°	02:21	03:39	B	1.16E
33141	HD 222368	23 39.8	+05°05'	"	IIaOb	"	71°F	03:47	03:53	C	0.12W
33141F	Focus			"	IIaO	13	"			A	

Dome Temp. 71°F H=79%

Focus 20 R

Dome Temp. 69°F H=90%

Transparency Conditions Clear some haze

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 33W	+29° 06′	1-2"	955	F7V	6-6-6- 6-6-6	551	800/300	Fld drawn	FINE
01 08E	+30° 51′	"	280	K3III	6-6-6- 6-6-6	"	800/300	Fld drawn	SL. wk
00 12W	+05° 34′	2-3"	164	F7V	12-18	stellar	40/16		FINE
					7/7				

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Date 1970 July 26/27 Sun-Mon Observer Herbst-McN Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33442	HD 160762	17 36.6	+46 04	G-2	IIaO	9L	79°F	20:43	20:46	A
33443	HD 131861	14.50.9	+45 43	"	IIaO B	13-0.4	78°F	21:06	22:07	C
33444	HD 209853	22 01.3	+46 45	"	"	13-0.4	77°F	22:21	22 57	A
33445	HD 176318	18 54.6	+38 07	"	IIaO	9L	77°F	23 18	23 40	B
33446	HD 10133	1 31.2	+23 52	"	IIaO	13L	77°F	23 57		C
33446	S Cephei HD 213306	22 25 5	+57 34'	"	IIaO B	9L	76°F	00 40	00 49	B
33447	HD 4388	00 41.1	+30 25'	"	"	13S	75°F	01 04	03 25	A
33448	HD 10435 (Cha)	01 34.7	+40 04'	"	"	13L	74°F	03 43	34 00	C
33448F	focus			"	IIaO	9				B

Dome Temp. 75°
Focus 21.6
Dome Temp. 75°

Hour Angle End	D
01 02	+4
03 41	+4
1 16	+4
00 40	+4
21	+3
34	+3
34	+3

Dome Temp. 75° H=79%
Focus 20 R
Dome Temp. 70° H=84%

Transparency Conditions 2nd dome but fairly hazy — ground fog but clear w zen=42 up to 300

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 52E	+46 05	2"-3"	3.62	B3V	18-18	Bp Photometric (BW)	40/19	poor guiding	FINE
03 12W	+45 30	2"	7.64	F3	12-12-12	Spectroscopic Binary	400/175	poor guiding	FINE
03 05E	+47 08	1"-2"	7.5	K0	6-6 6-6-6	"	500/320		FINE
00 43W	+23 17	2"-3"	5.7	B6.7	6-18-12	"	200/100	COMPLETELY BLACK	
			9.55	F7V		SSV	800/300	15 sec 30 = 5 sec 10 forget	
01 40E	+58 18	2"	4.1-5.2	F5-G2	18-18	Cepheid Phot	90/40	forgot long exposure and guiding	FINE SL. WK
01 05E	+20 47	Variable 2"-4"	3.5	K3III	6-6 6-6-6	SSV	300/300	N following — clouds	
01 37E	+40 28	2"	4.76	B8III	12-12-12	Bp Photometric (BW)	200/100	broken 2 pcs.	FINE
"	"	out			7/7	no filter			CLOUDS
	Area	looked	like	left	side			Main focusing	knob
	of	contacted		right	side			shorted out the focusing.	
								Focus Scr. Replaced 7/27/70 HH	

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Date 1970 July 27/28 Mon.-Tue **Observer** Ske - Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33449	HD 188727	19 51.5	+16 22.2	G-12	IIaO	9L	71°	23:54	01:10	A	
#33448 T1	calibration strip marks				IIaO			for plate 33442, 33445			
T2	"	"	"		IaO-b			for plate 33438 – 33441,			
T3					IIaO			for plate 33431 – 33437,			
T4					IIaOb			# 33446			

Dome Temp. 74° H=81%

Focus 20 R

Dome Temp. 73° H=81%

Transparency Conditions very hazy & cloudy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 20 W.	16° 36′	2′	5.8: −7.02	F6 I b −G5 I b	12-1-42	Cepheid	200/105	cloud, cut short	U.S.L.WK
								Closed DZ h	
			MWP: 2/9.0			min @ 6V PE		PE July 1970	
33443,	33444					"			
33447-	33447					"			

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Date 1976 July 28/29 Tues-Wed Observer Eaj - Tm Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33450	HD 187847	19 47.0	+38 27'	G12	IIaO	9L		22:59	00:50	A
33450F	Focus					9	75°F			B =?
33450 T1	calibration step wedge for plates 33449, 33450									

Dome Temp. 7
Focus 20
Dome Temp. 7

Hour Angle End

Dome Temp. 77°F H: 84%
Focus 20 R
Dome Temp. 75°F H: 67%

Transparency Conditions very hazy

closed on cloud

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
50	A	01 09 W	+38 41	2-3	6.90	M2III	12-12-12	VIS [illegible]	200/170	thick cloud	(GUIDING) WEAK
	B						7/7	no filter			PROB. DUE TO CLOUDS?
	=:										FOCUS: SL. CENTRE TO VIOLET
		changed focus to				5-R	/ 29 July - 70				

also - Light switch in 79" darkroom is bad, could cause nasty accident please tell Frank

Note* Sid Time clock fast = 1 min same as clock in basement. Could you reset & inform me please. I [illegible] [illegible] for [illegible] [illegible] more.

Sw. Replaced: 7/29/70 Hr

Date 1970 July 29/30 W56/24HR Observer T. Gull CF Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33451								22:56		A	
	HD 193183	18 57.5	+29° 23'	G12	IIaO	9L	79°F	20:55	22:31	B	00 18E
33452	HD 128947	19 05.5	+30° 24'	"	"	"		22:34	00:34	C	
33452	Jour test			G12	IIaO	9				B	
33452 T1	calibration step wedge for plate				IIaO 33451, 33452				July 30/70		

Done Temp.
Focus
Done Temp.

Dome Temp. 76°F 79% H

Focus 5R

Dome Temp. 73°F 86%

Transparency Conditions Very hazy

Foggy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
			6.01	B9			20"/130		—
00 18E	+29° 31'	2"-3"	6.64	A0	17-17-17	Ap Sm	400/250	BOTH NUMBERED ...51	(GUIDING) V. SL. WK
01h 37m W	+30° 34'	3"	6.66	B9	17-17-17	"	400/147	fog, haze	SL. WK-WK CENTRE TO UT.
in in 1 and out					7/7	no filter			
								INCREASING SHOULD BE CONTINUED	
NWP-2/ 9.0 min @ 00° E / 2 to 1 IT								Closed 00 30	
								JIM: STILL NO TIME SIGNAL AS OF FRI A.M.	

Date 1970 July 31 - Aug 1 Observer TH - GU - CF Julian Day

Dome Temp. 7
Focus 1
Dome Temp. 7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle East
33453	HD 158013	17h21.7m	+57° 05'	G12	IIaO	9L	75°F	21:21	00:01	A	0h5.5m

Dome Temp. 74° 88%

Focus 5-R

Dome Temp. 72° 93%

Transparency Conditions very clear but some fog

closed 23:30 (too much humidity fog)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02h 58m W	+57 04	2"	6.61	A2	17-17-17	Apem	400/250		U. SL. STR

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Date 1970 Aug 1-2 Sat-Sun Observer Ty-CF Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33454	AG10133	19 31.0	+28 52	G12	IIaO baked	13-.3	74%	20:30	00:28	A
33455	HD187691	19 46.2	+10 10	"	IIaO baked	13-.3	"	00:37	00:51	B
33456	HD209813	22 01.0	+16° 45	"	IIaO	13-.3		01:02	02:34	B
33457	HD268	00h 2.3m	-25° 55'	"	IIaO	13-.3	70°F	03:05	04:14	A
33457F	Focus			"	IIaO	13	68°F			C

Dome Temp. 76
Focus 5.
Dome Temp. 6

Hour Angle End	
01 12W	+2
01 25W	+1
01 51W	-1
02 34W	-2

Dome Temp. 76°F H=55%
Focus 5-R
Dome Temp. 67°F H=60%

Transparency Conditions very good Excellent
Variable seeing

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 18 W	+29 04	2-3"	9.55	F7V	5-6-6 6-6-6	S S V	800/300	Fld Drown	FINE
01 26 W	+10° 26'	12"	5.8	F8	12-12-12	std vel	40/17		SL. STR
00 55 W	+47° 08'	2"	7.5	K0	12-12-12	Sp Bin	400/200		FINE
00 33 W	-25° 23'	3"	6.9	F5	12-12-12	C-1001(CF)	40/92	cutshort by dawn	VERY WEAK
					7/7				GOOD

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Date 1970 Aug 2-3 Sun.-Mon. Observer Tu-HL Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33458	HD 174853	18 47.5	+13 51	G12	IIaO	9L		20 35	21:17	A	01 06E
33459	HD 170200	18 23.1	+6 08	"	"	13L	74°F	21 31	21 45	B	00 16E
33460	HD 169578	18 20.2	+5 02	"	"	"	73°F	21 50	22 40	C	00 43W
33461	HD 180553	19 11.9	+27 27	"	"	"	71°F	22 44	23 29	A	00 36W
33462	HD 186791	19 41.5	+10 22	"	"	"		23 28	23 36	B	00 20W
~~33463~~	~~HD 195964~~							23 49			
33462F	Focus						70°F			B	

Dome Temp. 7
Focus
Dome Temp. 6

Dome Temp. 71°F H=57%

Transparency Conditions Poor : Cl

Focus .....

Dome Temp. 68°F H=70%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 06 E	+14 ' 00	2-3"	6 1	B8 V	12-12-12	B-type Spec Bin	200/100	Thru' c'loud	SC. STR
00 14 E	+06 15'	2"	5.7	B8 III	12-12-12	"	200/100	Sid clock slow ½ min] reset	SC STR
00 43 W	+01 09	2"-3"	6.5	B8 V	12-12-12	"	200/100	cloud	SC. STR
00 36 W	+27 28	3"	6.3	B5 III	12-12-12	" /	200/100	cloud	SC. STR
00 20 W	+10 36	2"-3"	4.15	K3 II	12-12-12	std vel	200/100	"	FINE
			5.6	3 V	12-	3-type Spec Binary	200/	"	
					7/7	not filter			GOOD
								Close/ 00:30 cloud	

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Date 1970 Aug 3-4, Mon-Tues **Observer** Tn, Hb **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33463	HD 174853	18 47.5'	+13 51	G12	IIaO	13L	70°F	20:28	20:56	A	01 24E
33464	HD 165814	18 07.0	-25° 29'	"	"	"	66	21 02	22:48	B	01 13W
33465	HD 169578	18 20.2	+05° 02'	"	"	"	"	22 52	23:46	C	01 54W
33466	HD 170200	18 23.1	+6° 08'	"	"	"	64°F	23:49	00:11	A	02 15W
33467	HD 180553	19 11.9	+27 07	"	"	"		00 14	00 46	B	02 08W
33468	HD 193964	20 18.0	+61 56	"	"	"		00 59	01 13	C	01 36W
33469	HD 1256	00 09.3	-21° 00.6	"	"	"		0125	02 29	A	01 14E
33470	HD 180553	19 11.9	+27 17	"	"	"	61°F	02 35	03 07	B	04 25W
33471	HD 24769	03 51.1	+22 53	"	"	"		03 12	03 34	C	03 49E
33472	HD 16219	02 31.1	+39 28	"	"	"		03:38	04 00	A	02 03E
33473	HD 12929	02 01.5	+22 59	"	"	"		09:06	04 08	C	01 25E
33473F				"	"	B	60°F			B	
33473 T1	calibration	step wedge			IIaO			33454, 33455			
T2		"			IIaO			33453, 33456 - 33461			
T3					"			33462, 33463, 33465 - 33472			
T4					"			33464, 33473			

Dome Temp. 68°F H=55%

Focus 5-R

Dome Temp. .....

Transparency Conditions Very good

very bad seeing

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 24E	+13°58′	3-4″	6.1	B8V	12-12-12	B-type Spec. Bin	200/100	(broken 2pc)	V.SC.STR
01 13W	-25°24′	3″+	6.27	B8	12-12-12	"	200/80	Vis.table — no reference to this p=12″, θ=80° in BSC, IAU, HD	BROKEN FINE
01 54W	+05°09′	3″	6.5	B8V	12-12-12	"	200/100		V.SC.STR
02 15W	+06°14	3-4	5.7	B8III	12-12-12	"	200/100		SC.STR
02 03W	+27°26′	"	6.3	B5III	12-12-12	"	200/100		SC.STR
01 26W	+62 13	2	5.6	B9V	12-12-12	"	200/100		SC.STR
01 14E	-20 15	3″	6.5	B7III	12-12-12	"	200/100		STR
04 25W	+27 30	"	6.3	B5III	12-12-12	"	200/100		(over-exp) SC STR
03 49E	+23 12	2-3	6.0	B9.5IV	12-12-12	"	200/100		V.SC.STR
02 03E	+39°49′	"	6.4	B8	12-12-12	"	200/100		SC.STR
01 25E	+23 23	"	3.15	K2III	12-24	Std Vel	40/20		STRONG
					7/7	no shift		(Vel check / 2 Orig	GOOD
4 Orig 1 20			2nd 2.2		9.0	min @ 68°=		2 Sc. Sp	
						"			
						"			
						"			

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Date 1972 Aug 4-5, Tues Wed Observer Tm - Hb Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle East
33474	HD169578	18 20.2	+05 02	G12	IIaO	13L	65°F	20 36	21:36	C	00 17E
33475	HD170200	18 23.1	+06 08	"	"	"		21 48	22 04	B	00 00W
33476	HD174853	18 47.5	+13 51	"	"	"	64°F	22 09	22 35	A	01 25W
33477	HD180553	19 11.9	+27 17	"	"	"	"	22 39	23 03	C	00 25W
33478	HD193964	20 18.0	+61 56	"	"	"		23 12	23 26	A	00 08E
33479	HD170200	18 23.1	+06 08	"	"	"		23 39	23 56	B	02 00W
33480	HD219749	23 13.2	+44 57	"	"	"	62°F	00:06	00 32	A	02 09E
33481	HD193964	20 18.0	+61 56	"	"	"	"	00:41	01:27	B	01 47W
33482	HD180553	19 11.9	+27 17	"	"	"		01:32	02:14	C	03 35W
33483	HD3712	00 34.8	+55 59	"	"	"	60°F	02 24	02:36	A	01 26E
33483F	Focus			"	"	13	59°F			B	
33483 T1	calibration	slip	wedge		IIaO	flats, 33474 - 33483					
G40 Focus Tests		[(F2 ~~F1~~, A holder)	(F3 ~~F2~~, B)	(F4 ~~F3~~, C)	setting 35]		59°F				

Dome Temp. 63°F H=57% Transparency Conditions Poor

Focus 5-R

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 13E	+05° 09'	1-2"	6.5	B8V	12-12-12	B Style Same Bin	200/100	broken ~3"	BROKEN U-SC. STR (GUIDING)
00 12W	+06 15'	"	5.7	B8III	12-12-12	"	200/100		STRONG
00 20W	+14° 00'	2-3"	6.1	B8V	12-12-12	"	200/100	broken ~2"	BROKEN SC. STR
00 20W	+27° 28'	"	6.3	B5III	12-12-12	"	200/100		SC. STR
00 17E	+62 12	"	5.6	39V	12-12-12	"	200/100		SC. STR
02 05W	+06 15'	"	5.7	B8III	12-12-12	"	200/100		SC. STR
02 09E	+45 24	2"	6.27	B9.5III	12-12-12	"	200/100		U-SC. STR
01 43W	+62 12	2-3"	5.6	B9V	12-12-12	"	200/100	cloud	U. SC. STR
03 35W	+27 29'	2"	6.3	B5III	12-29	"	200/50	" cut by cloud	SC. WK
01 26E	+55° 25'	"	3.34	K0II	12-18	Std Vel.	40/26	cloud	(GUIDING) SC. WK
	min/out/wet				7/7	no filter			GOOD
								Anson*, could you cut some G40 plates from the too long G12 plates, Tx	GH
mean 2/9.0 min 60°F/ 200c 19./ cmg									
[B holder only (~~F4~~ set 36), ~~F5~~, set 37, ~~F6~~ set 34, ~~F7~~ set 33]								1st 4 plates from 1 box remainder from another	

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Date 1970 Aug 31/Sept 1 Wed/Thurs **Observer** McN-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33484	HD 5704	17 25.6	-26 11	G12	IIIa O	9L	69°F	20 32		A
33484	HD 161284	17 13.1	+14 30	G12	IIIa O	9L	69°F	21 04	21 16	B
33485	HD 179838	19 09.0	+29 03	"	"	9L	68°F	21 23	22 31	C
33486	MG 10123	19 31.0	+23 52	"	"	13.5	67°F	22 45	01 35	A
33487	HD 197461	20 38.8	+14° 43'	"	"	9L	65°F	01 41	01 47	B
33488	HD 209813	22 01.0	+46 45	"	"	13.5	64°F	01 54	02 26	C
33489	HD 13029	01 53.0	+28 54	"	"	13.4		02 33	03 47	A
33490	o Ceti	1970.0 02 17.8	1970.0 -03° 07'	"	"	9L		03 50	04 04	B
33491	γ Peg HD 886	00 08.1	+14 38	"	"	"		04 08	04 10	C
33491F	Focus			"	"	9	63°F			E
33491 T1	calibration	exp. curve			IIa O	for plates 33484 - 33491				
	G40 Focus (G	4,06 3m 1,2,3 at 35	Sec, T-66°			Middle Class M, B, C		- slit = 13		
		7,09 3m 9,11,13 at 35								
		13,15,17 35								

Dome Temp.
Focus
Dome Temp. 60

Hour Angle End

Dome Temp. 66°F H=62%

Transparency Conditions Scattered cloud

Focus .....

Dome Temp. 60°F H=69% Looked at Saturn at Noon (great with good seeing) Excellent after 21h

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	−26 70		6.01	B7	17-	Gx Sp Nebs.	20/25	Cloud	
00 42W	+14 31	2"-5"	4.41	M5E	13-18	Sp Vel	20'/170	cloud	FINE
00 02E	+27 15	1"-2"	6.93	A0?	17-17-17	Gx Sp Neb	'/250		(wind-driven) FINE
02 41W	+29 05	1"-2"	9.15	F7I	6-6-6 6-6-6	SV	'/1336	field drawn * off to Fornax of plate box	FINE
01 45W	+15 01	"	4.53	A5	17-17-17	Ap Em	80/15		FINE
0101W	+47 07	"	7.5	K0	12-12-12	Sporadic Em	400/200	also	FINE
01 30E	+29 16	1"-2"	8.96	K2 III	6-6-6 6-6-6	S SV	860/340	* fantastic seeing Fld drawn maybe problem	V.Sc.Wk.
0133E	−23 02	1"-2"	6.	M.	12-12-12	Mira	40/36	Looks quite bright	Sc. Wk
01 39W	+15 08	"	2.60	B2.5	18-18	Bp prog	40/17		(wind-driven) STRONG
					7/7	no filter			Good
Thin Wisp 8/4.0 min @ 61°F/12 m.c./59/ cCcy									
>									

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Date 1970 Aug 5/7 Thurs/Fri Observer Jn She, Evans Julian Day

Dome Temp. 58
Focus
Dome Temp. 62

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33492	Top HD 162714	17 49.3	-06° 07.2	G12	IIaD	9L	72°F	20:37	22:09	A	01 03W
[illegible]	HD 178359	19 03.2	+01 09	"	"	13.4	70°F	22:27	00:23	B	02 55W
33494	HD 186688	19 40.8	+29 01.4	"	"	9L	69°F	00:31	01 43	C	03 47W
33495	HD 187929	19 47.4	+00 44.9	"	"	"	"	01.51	0201	A	03 53W
33496	HD 188727	19 51.5	+16 22.2	"	"	"	67°F	02:08	0230	B	04 22W
33497	HD 197572	20 39.5	+35 13.4	"	"	"		02:55	04:05	C	04 57W
33498	HD 213306	22 26.4	+57 04.2	"	"	"		04:09	04:14	A	06 06W
33499	HD 3712	00 34.8	+55° 59	"	"	"	66°F	04:20	04:23	C	06 15W
33499 F	Focus			"	"	9	66°F			B	
33499 71	calibration step wedge				IIaO	for plates 33492-33499					

Dome Temp. 68°F H=61%

Focus .....

Dome Temp. 63°F H=77%

Transparency Conditions ... some cloud
Excellent after 04

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
09		01 03W	-06 04	1-2"	7.21-7.53	F8-G2	12-12-12	Cepheid	200/130		SL. WK
23	B	02 00W	+01 19	"	7.29-8.08	F8-K0	12-12-12	"	200/100	cloud (NE wrote it)	CLOUD FOLLOWED SL. WK
47	C	02 43W	+29 15	"	6.8-7.66	F0-G1	12-12-12	"	200/130		FINE
01		02 53W	+01 00	"	4.08-5.25	F636-G416	12-12-12	"	200/120	NE's CAN'T READ NOW.	
10		03 40W	+16 38	2"	5.87-7.02	FG16-G51	12-12-12	"	200/130		
05		04 07W	+35 33	"	6.5/2-	F7b-G2b	12-12-12	"	200/130		SL WK
14	F	02 30W	+58 19	"	4.1-5.2	F5b-G2b	12-29	"	40/23		FINE
33	C	00 28W	+56 26	"	3.34	K0b	18-18	std vel	40/26		FINE
							7/F	no filter			GOOD
		8.6 min @ 69°F / mag-2				Cong	7/20	2 Aug 19			

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Date 1977 Aug 26 FRI/SAT **Observer** TA-GL **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33500	HD 156704	17h 25.7m	-26° 11'	G12	IIIa-J	9L	74°F	20.28	21:50	A	
33501	HD 140573	15 39.4	+06° 21.7'	G12	"	"	74°F	22:01	22:05	B	
33502	HD 140573	"	"	"	"	"	"	22:11	22:15	B	
33503	HD 183339	19 24.0	+57° 49'	"	"	"		22:29	23:00	A	
33504	HD 187279	19h 44.1'	+31° 15'	"	"	"	73°F	23.05	23:49	B	
33505	HD 204934	21h 26.7m	+27° 56'	"	IIIa-J 0b baked	13s	"	00.00	01:36	B	
33506	HD 223094	23 41.5	+28 09	"	IIIa 0b baked	13s		01:43	02:32	C	
33507	HD 219449	23 14.3	-01 14.1	"	IIIa 0	9L		02:41	02:53	A	
33508	AR 120	1h 53.3m	+28° 54'	"	IIIa 0b	13s		03.03	04.01	B	
33509	HD 12929	02 01.5	+22 59	"	IIIa 0	13s		04.04	04:06	C	
33510	53 And	01 34.7	+40 04	"	"	9L		04.10	04:16	A	
33510 F	focused			"	"	9	69°F				
									(F2-F1)		
	focusted			640				A1-9	T = 69°F		
								Setting			

Done Temp. 73
Focus
Done Temp. 69

Dome Temp. 70°F 61%H

Focus .....

Dome Temp. 66°F 68%H

Transparency Conditions Very good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 08W	-26° 08'	1"-2"	6.01	B9	17-34	G1 Apem	400/185	cc/short limit	WEAK
03 09W	+6° 35'	"	2.66	K2 III	18-18	Bj Lum Proj	40/25		O.SC.WK
03 19 N	+5° 35'	"	"	"	18-18	"	40/25		O.SC WK
00h 21m N	+58° 00'	1"	6.41	B8	17-17-17	G1 Apem	400/250		FINE
00 50W	+31° 31'	1"	6.65	A0	17-17-17	"	200/125		FINE
00 54W	+28° 24'	1"-2"	9.64	K1 III	6-6-6 6-6-6	SSV	800/300	fld drawn) I-cc	FINE
00 25m E	+25° 36'	"	8.97	K5 III	6-6-6 6-6-6	"	800/300	" " "	BROKEN FINE
00 27W	-09° 10'	2"	5.96	K2 III	18-18	Bj Lum Proj	40/25		SC. WK
01h 11m E	+29° 12'	1-2"	8.96	K2 III	6-6-6 6-6-6	SSV	800/300	some fld on 33+29	FINE
01 11 E	+23° 23'	2"	3.15	K2 III	36	std Vel	40/17		FINE
00h 35m E	+40° 28'	2"	4.76	B8 IV	18-	Bp rvg	40/17		FINE
					7-7	ref stars			GOOD

GH. Ha. Ge 120 visitors.

43

Date 1970 Aug. 8-9 Sat-Sun Observer GH-Tm Julian Day

Dome Temp. 7
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33511	NGC 7209 Star 102	22 01.2	+46° 00	G40	IIaO	13L	72°F	23:00	03:00	A	
33512	HD9138	1h 24.9	+05° 38	G40	"	18L	70°F	3:17	3:25	A	
33513	"	"	"	"	"	13L	70°F	3:31	3:38	A	
33514	"	"	"	"	"	13S	70°F	3:44	3:50	A	

Dome Temp. 70°F H=59%

Focus .....

Dome Temp. .....

Transparency Conditions ..... Very good -> Excellent

Gen Voltage low, 100 volts (Prob reason for slow motions) 44

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3:00	A	01 47W	+46 21	1"-2"	10.75	K5 Ib	5-6		800/190	setting 37 (T=94° 2 Below)	FINE
3:15	A	01 12E	+06 04	2"	6.2	K4	4-4-5		200/50	36	STRONG
	A	00 57E	+06 04	11	11	11	4-4-4		200/35	36	FINE
	A	00 42E	+06 04	11	11	11			200/35	36	SL. STRONG

45

Date 1970 Aug 9-10, Sun-Mon Observer Tn, HL Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33515	HD170200	18h 23m	+06° 08′	G12	IIaO	13L		20:21	20:49	A	00 42E
33516	HD 169578	18 20.2	+05 02	"	"	"		20:54	22 16	B	00 [illegible]
33517	HD 174852	18 47.5	+13 51	"	"	"	75F	22:22	23 08	C	01 12W
33518	HD 180553	19 11.9	+27 17	"	"	"	74°F	23 14	23 58	A	01 39W
33519	HD 193964	20 18.0	+61 56	"	"	"	"	00 04	00 28	B	01 19W
33520	HD 219749	23 13.2	+44°57′	"	"	"		00 34	01 16	C	01 05E
33521	HD 180553	19 11.9	+27 17	"	"	"	71°F	01 21	02 29	B	04 10W
33522	HD 193964	20 18.0	+61 56	"	"	"		02 36	02 56	A	03 31W
33523	HD 24769	03 51.1	+22 53	"	"	"		03 02	03 46	C	53 14E
33524	HD 12929	02 01.5	+22 59	"	"	"		03 53	03 56	B	01 13E
33524F	Focus						70°			B	
33524 T1	calibration step wedge				IIaO	for plate,		33505, 33506, 33508			
T2					" aO	33500 - 33504, 33507, 33509 33510					
T3					" aO	33515 - 33523					
T4					" aO	33524					

Dome Temp. 72
Focus
Dome Temp.

Dome Temp. 72°F H=60%

Transparency Conditions haze

Focus .....

Dome Temp. 67 H 77

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 42E	+06 16	2"	5.7	B8III	12-12-12	B-type Spectra.	200/100	~1 mag. absorption due to haze	FINE
00 48W	+05 10	"	6.5	B8V	12-12-12	"	200/100	sheet lightning	FINE
01 12W	+14° 00'	"	6.1	B8V	12-12-12	"	200/100		FINE
01 39W	+27 28'	"	6.3	B5	12-12-12	"	200/100		FINE
01 09W	+62°12'	"	5.6	B9V	12-12-12	"	200/100		FINE
01 05E	+95°22'	"	6.27	B9 (p?)	12-12-12	"	200/100		FINE
04 10W	+27 29	"	6.3	B5III	12-12-12	"	200/100		V. Sc. Wk
03 31W	+62°12'	"	5.6	B9V	12-12-12	"	200/100		V. Sc. Wk
03 14E	+23 09	"	6.0	B9.5IV	12-12-12	"	200/100		Sc. Wk
01 13E	+23 28	"	3.15	K2III	18-18	std vel	40/26		FINE
					3/7	no fit			VERY SLIGHT CENTRE TO R.
2WP-0/ 9.0 min (c		68° c	/2	40 c	J 9			10 Aug / 70	
				"				"	
				"				"	
				"				"	

Date 1970 Aug 10-11 Mon Tues **Observer** HB-R **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33525	HD 165814	18 02.7	-25° 29	G12	IIaO	13L	78°F	20:33	22 17	A
33526	HD 169578	18 20.2	+05 02	G12	IIaO	13L		22:24	23:22	C
33527	HD 170200	18 23.1	+06 08	G12	IIaO	13L	76°F	23 30	23:58	A
33528	HD 174853	18 47.5	+13 51	G12	IIaO	13L		00:05	00 39	B
33529	HD 180553	19 11.9	+27 17	G12	IIaO	13L		00:43	01 25	C
33530	HD 193964	20 18.0	+61 56	G12	IIaO	13L		00:31	01:52	A
33531	HD 219749	23 13.2	+44° 57	G12	IIaO	13L	75°F	01 59	02:38	B
33532	HD 1256	00 11.7	-20 46	G12	IIaO	13L		02:46	04:22	C
33532F	Focus Test						73°F			B
33532 71					IIaO	plate	33525-33532		11 Aug	

Dome Temp. 7x°
Focus
Dome Temp. 7x°

Hour Angle End	
C: 10W	-2
61°58W	-0
5°: 2	-0
02°W	-0
03°W	-2
03°W	-2
04°W	-2
04°W	-2
5°: 0W	-2
W 04	-2

Dome Temp. 74°F H. 60%

Transparency Conditions hazy

Focus .....

Dome Temp. 70°F H 64%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 10 W	-25° 22'	1-2"	6.7	B8	12-12-12	B-type Spec Bin	200/38		WEAK
01"58 W	+05° 10	1-2	6.5	B8 V	12-12-12	"	200/100		FINE
02 43 W	+06° 16	"	5.7	B8 III	12-12-12	"	200/100		(GUIDING) O.SL.WK
02 47 W	+14° 00	"	6.1	B8 V	12-12-12	"	200/100		FINE
03 10 W	+27° 27		6.3	B5 III	12-12-12	"	200/100		SL. STR
02 32 W	+62 13	1-2"	5.6	B9 V	12-12-12	"	200/120		SL. STR
03" 21 W	+45 20	"	6.07	B9 (2)	12-12-12	"	200/100		(GUIDING) SL. STR
01 06 W	-20 19	2"	6.5	B7 III	12-12-12		200/50		SL. WK
					7-7 no filter				GOOD

New WP-2 / 9.0 min @ 68°F / 2 sec, 2 sq

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Date 1970 Aug 11-12 Tues Wed **Observer** R. - Hine **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33533	HD 165625	18 01m49s	+22° 13	G12	IIaO	9L	76°F	20:22	21:50	A
33534	HD 175865	18 52m18	+43° 49	G12	IIaO	9L		22.02	22:43	B
33535	HD 183439	19 24m33	+24° 28	G12	IIaO	9L	75°F	22.55	23:40	C
33536	HD 206149	21h 39m05	+40° 42	G12	IIaO	9L	74°F	23:52	01:44	A
33537	HR 8615	23h 25m28s	+21° 57	G12	IIaO	9L		01:51	04:13	B
33537F1	focus [illegible]	out of [illegible]		G12	IIaO	9	72°F			B
33537 F1	calibration	slit wedge			IIaO	33533 - 33537			12 Aug 70	
		W.S.	Focus test	T 20°	[illegible]			41-7		
								Set 33-39		
						B3 = 35 = F2				
						A4 = 36 - F3				
						B5 = 37 - F4				

Dome Temp. [illegible]
Focus 05 [illegible]
Dome Temp. [illegible]

Hour Angle End	
0-49W	
0-59W	
1-05W	
1-05W	
1-15W	

Dome Temp. 73°F H 74%

Focus 05 R

Dome Temp. 70°F H 81%

Transparency Conditions hazy

cloud at 21.20 clears up again 22.30

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0H48W	+22° 17	2	6.67	gM2	12-12-12	M* Prog.	200/200	clouds	SL WK
0H51W	+43° 57	2	4.3	M5III	12-12-12	"	200/200	clouds	V. SL. WK
1H15W	+24 40		5.96	M0III	12-12-12	"	200/200		O. SL. WK
1H05W	+41° 05	2-3	6.89	gM2	12-12-12	"	200/200		WEAK
1H45W	+22 25	3	6.86	gM5	12-12-12	"	200/200	hazy	WEAK
					7-7	no filter			GOOD
Mcap. 2/ 9.0 min @ 68°F = /240c -59									

1 11
1 51
2 62

51

Date 1970 August 13/14 Thurs/Fri **Observer** McU-Ri **Julian Day**

Dome Temp. 72°F
Focus 20.0
Dome Temp. 69°F

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33538	HD 154528	17 00.9	+77°48'	G-12	IIaO	9L	75°F	20 16	22:05	A	02h 17m W
33539	HD 176798	19 56.9	+43 07	"	"	"	74°F	22 12	23:41	B	1h 53m W
33540	HD 202213	21 59.9	+30 33	"	"	"	73°F	00 00	02:18	C	02h 4m W
33541	HD 6833	1970 coord. 01 07.9	1970 coord. +54 35	"	"	"	73°F	02:23	04:16	A	10 9m W
33542	HD 3360	00 31.4	+53° 21	"	"	"		04:20	04:23	B	01h 50m W
33542	focus test	[illegible]		G12	IIaO	9	72°F			B	

Dome Temp. 72°F H=75%

Focus 20.0 R

Dome Temp. 69°F H-76%

Transparency Conditions Hazy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02H17W	77° 44'	2	6.66	A0	17-17-17	GI Ap Programme	400/230		SL. WK
01 53W	+43° 15'	1"-2"	7.27	A3	17-17-17	"	400/250		V. SL. WK
02 16W	+30° 54'	1-2	7.56	A0	17-17-17	"	400/250	field drawn	V. SL. WK
00 19W	+54° 37'	2	6.73	K1III	17-7-12	Bj Lum Prog.	400/250		SL. WK
01 00W	+53° 46		3.41	B2II	18-18	Bp Pros.	40/20		STRONG
					7-7	no filter			GOOD

53

Date Fri 29 Aug 14-15 1970 **Observer** Ri-EIM **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33543	HD182955	19 22.1	+19 41	G12	IIaO	9L	78°F	20'8	22 11	A
33544	HD 189577	19 55.6	+17° 15	G12	IIaO	9L	77°F	22 22	00:10	B
33545	HD 198134	20 43.2	+34 00	G12	IIaO	9L		00:21	01:28	C
33546	HD 218632	23 04 5	8 08	G12	IaO	9L	74°F	01:33	3:56	A
33547	HD 17506	02 43.4	55 29	G12	IIaO	7L		04:08	04:33	B
33547F1	focus test	on axis		G12	IIaO	9	74°F			B
33547 F1					IIaO for plates 33535 – 33547 15 Aug/70					
	Fo axis test 640		T=75°		sato	35–41		Plates C1–C7		
					c2 = 36 = F2					
					c3 = 37 = F3					
					c4 = 38 = F4					

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. 74°F H 75%

Transparency Conditions hazy

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0h05w	+19° 54'	2	7.74	M2III	12-12-12	[illegible]	400/430		SL. WK
0h27w.	+17° 30'	2-3	7.00	M4III	12-12-12	"	400/430	BROKEN 2 PIECES	SL. WK
01h57w	+34 20'	2	6.37	K3III	12-12-12	"	400/340	1	V. SL. WK
02h05w	+08 35		6.58	K6I	12-12-12	"	400/340	BROKEN 2 PIECES ½ IN.	WEAK
01h40m E	+55° 40	2	5.41	K3I6	12-12-12	"	240/168		WEAK
					7-7	no filter			GOOD
mwp 2/9.0 min @			68° F / 2		FOC	IT9			

THE TENDENCY FOR WEAK PLATES (BOTH NIGHTS) IS MOST PROBABLY DUE TO THE LONG EXPOSURE TIMES.

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Date AUG 16/17 1970 Observer WEST-R. Julian Day 2440815.5

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33548	HD 187691	$19^h 46^m.2$	+10° 12'	G12	IIa-O	9L	7	20:12	20:43	A	1°44E
33549	ADS 14893	$21^h 16^m.5$	+09°55'	G12	"	"	78°	20:53	23:00	B	0°55E
33550	" "	$21^h 16^m.5$	+09°55'	G12	"	"		23:02	00:46	C	0°50W
33551	HD 222368	$23^h 34^m.8$	+05° 05'	G12	"	"	72°F	00:52	01:07	A	1°07E
33552	ADS 14893	$21^h 16^m.5$	+09°55'	G12	"	"		01:14	02:46	B	3°50W
33553	ADS 14893	$21^h 16^m.5$	+09°55'	G12	"	"		02:49	04:10	C	04°5W
33554	HD222368	23 34.5	+05° 05	G12	IIa O	9L	68°F	04:15	04:32	A	35°11W
33554.1	focus test	out out/	in in	G12	IIa O	9				B	

Dome Temp. 7
Focus
Dome Temp. 6

Dome Temp. 74°F H 58°F

Focus .....

Dome Temp. 64°F H 74%

Transparency Conditions ..... clear .....

clouds at 21:00
cleared out 21:30

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1:44 E	+10 24	3	5.2	F8V	12-12-12		200/130	BROKEN 2 PIECES	BROKEN FINE
0458 E	+10 16	3	6.7	F8V	12-12-12		400/260	clouds	FINE
0450W	+10° 16		"	"	12-12-12		400/260		FINE
1m07E	+5° 32'		4.3	F8V	12-12-12		200/130		FINE
2m50W	+10° 16		6.7	F8V	12-12-12		400/260		FINE
0415W	+10° 16'	3	6.7	F8V	12-12-12		400/145		SL. CLOUDY
0417W	+5° 33	3	4.3	F8V	12-12-12		200/20		STRONG
					7-7	no filter			GOOD

57 MON-TUES

Date Aug 17/18/70 **Observer** WEST - Hr - R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	How Angle End
33555	HD 187691	$19^h 46.^m 7$	+10° 12'	G 12	IIaO	9	72°	20 17	20 47	A	
33556	ADS 14893	$21^h 16.^m 5$	+09°55'	"	"	"		20:55	22 39	B	
33557	" "	"	"	"	"	"		22 42	00:14	C	
33558	HD 222368	$23^h 34.^m 8$	+05°05'	"	"	"	66°F	00:27	00:43	A	
33559	ADS 14893	$21^h 16.^m 5$	+09°55'	"	"			00:50	02:07	B	
33560	" "	$21^h 16.^m 5$	+09°55'	"	"	"		02:11	03:55	C	
33561	HD 222368	$23^h 34.^m 8$	+05°05'	"	"	"		04:01	04:17	A	
33561 F1	focuster	on bank/edge		G 12	IIaO	9	63°F			B	
33561 T1	calibration	strip edge			IIaO	for plates 33548 - 33556 if Aug					
T2		"			IIIaO	" 33557 - 33561		"			
	F2	F3		G40	focus test	R1					
33561	T2-34, T2-35,	T3-36,	T4-37, T5-38, T6-39, T7-40			13	68°F			A	
			F-K								

Dome Temp. 7
Virus
Dome Temp. 6

Dome Temp. 70° #63°c

Transparency Conditions Good

58

Focus .....

Dome Temp. 60°F H76%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01h35mE	+10 24	4-5	5.2	F8 II	12-12-12		200/130		FINE
01h14mE	+10 17		6.75	F8 V	12-12-12		400/260		FINE
00h25mW	"		"	"	12-12-12		400/260		FINE
1h28mE	+05° 33	3	4.3	F8 II	12-12-12		200/130		STRONG
2h15mW	+10° 17	2-3	6.75	F8 V	12-12-12		400/260		FINE
4h03mW	"		6.75	F8 IV	12-12-12		400/260		FINE
2h01mW	+05° 34'		4.3	F8 V	12-12-12		200/130		FINE
					7-7	no filter			
NWP 2/9.0 min @ 68°E / 2 90c (IG								PLATES 3354B - 3356 TAKEN 34 DR. WEST	
					9 sec.				

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Date Aug 19/20 Observer GH-Ri Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33562	HD 3765	0h35.3	+39°40	G40	IIaO	13L	70°				

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

sidereal clock 1 hour out
mean clock 1 hour out also
what's going on

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
			8.2	K5		GH-cluster		RV std Lovely!	!

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Date Thurs Aug 20/21/70 Observer L - She Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
						(KAPUTT)					
		Clock drive				Caput					
			REPAIRED			Aug 21 (L)					

Dome Temp. 54.°F 64%

Transparency Conditions .....

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality

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Date 1970 Aug 21/22 Fri/Sat Observer GI-McU Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33562	HD154528	17 00.9	+77 48	G-12	IIaO	9L	63°F	20 08	21 16	A	02 01 W
33563	HD176167	18 56.3	+42 52	"	"	"	62°F	21 36	23:26	B	02 11 W
33564	HD206250	21 36.0	+43 54	"	"	"	62°F	23 36	00 24	C	01 21 W
33565	HD209513	22h 01m.0 (1970)	+46° 45' (1970)	"	"	"	61°F	00 30 02	10 02:40	A	1.5 m W
33566	HD 6833	01h 07m.9 (1970)	+54° 35 (1970)	"	"	"	60°F	02 50	04:34	B	11h m W
33566F	[illegible]						59°F			B	

Done Temp. 54
Focus
Done Temp.

Dome Temp. 64°F H= 55%

Focus .....

Dome Temp. .....

Transparency Conditions quite clear, Trip of thin cloud after 00 hrs.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 01 W	77°44'	2-4'	6.66	A0	17-17-17	G1 Ap Pairs	400/250		FINE
02 11W	43° 02'	3"-3'	7.49	B8	17-17-17	"	400/265		FINE
00 28W	+44° 21'	2-3	6.68	B9	17-17-17	"	400/250	broken 2 pieces	BROKEN FINE — SC. WK
0^h 19^{m}W	+47° 08'	2'	7.5	K0	12-12-12	Binary	400/320		U. SC. WK
01^h 10^m W	+54° 39'	"	6.73	K1 III	12-12-12	Bj Lum Prog	400/245	cloud cut us off	SC. WK
		out-out bin in			7-7				VERY SLIGHT CENTRE TO UL

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SUN - MON

Date AUG 23-24/70 Observer Cyril Lovell J. Moore Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33567	HD 184467	19 29.5	+58 24	G 12	IIaO	9L		2032	2227	A
33568	HD 211300	22 11.1	+72 49	"	"	"		2246	0019	B
33569	HD 216916	22 51.9	+41 04	"	"	"		0055	113	C
33570	HD 218634	23 04.5	8.08	"	"	"	61°	0133	02.16	A
33571	HD 219449	23 57.5	- 4 38	"	"	"		02.39	03.01	B
33572	HD 9774	01 30.5	72°32'	"	"	"		03.20	03.47	C
33573	HD 17506	02 43.4	55 29	"	"	"		04.13	04.20	A
33574	HD 26965	04 10.7	- 7 49	"	"	"		04.34	04.53	B
4F	Focus TEST			OUT-OUT/IN-IN						
33574 T1	calibration step wedge				IIaO	plates		33562, 63, 65, 66		
T2	"	"	"			"		33567 - 33574		

Dome Temp. Focus Dome Temp.

Hour Angle End

Dome Temp. +61° H 74%

Transparency Conditions GOOD

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0046W	+5833	2	7.5	K5	12-12-12	STD. VEL.	400/350		FINE
0003E	+7312	3	7.08	G8 II-III	12-12-12	VIS. BIN. Waterloo	400/350		(~~GUIDING~~) STRONG *
0010W	+4129	3	5.48	B2 IV	12-12-12	"	200/100		STRONG *
0100W	+0833	3	6.58	K0 I	12-12-12	"	200/200		FINE
0140W	-0910	4	5.28	K0 III	12-12-12	"	200/200		(GUIDING) FINE
0002W	72,56	3	6.25	K2 III	12-12-12	"	180/180		POOR GUIDING FINE
0037E	55,48	3	5.41	K3 Ib	12-24	"	100/100		(GUIDING) FINE
0129E	-736	3	5.14	K0 V	12-12-12	"	100/95		FINE
					7-7	No Filter			VERY SLIGHT CENTRE TO W
								* APPEARS TO BE SHORT SLIT	
2 WP. 2/ 9.0 min @ 60° F/ 2 70 c.J 9									

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MON – TUES

Date Aug 24-25 / 1970 **Observer** BW **Julian Day**

Dome Temp. 6
Focus
Done Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33575	(ι Her) HD160762	17h 36m.6	+46°04'	6-12	IIaO	9L	67°F	20:55	20:58	A	1h 3m W
33576	(ε Cyg) HD184171	19h 28m.1	+34°14'	"	"	"	67°F	21:20	21:26	B	0h 3m E
33577	"	"	"	"	"	"	67°F	21:57	22:03	C	0h 17m W
33578	(κ Cap) HD192907	20h 12m.3	+77°25'	"	"	"	67°F	22:24	22:30	A	0h .m W
33579	(υ Cap) HD193432	20h 15m.1	−13°04'	"	"	"	66°F	22:47	23:02	B	0h 32m W
33580	(ι Aql) HD184930	19h 31m.6	−1°31'	"	"	"	66°F	23:13	23:20	C	1h 6m W
33581	(κ Aql) HD184915	19h 31m.5	−7°15'	"	"	"	65°F	23:31	23:47	A	2h 0m W
33582	(χ Aqr) HD212061	22h 16m.5	−1°53'	"	"	"	65°F	0:00	0:05	B	0h 20m E
33583	(32 Peg) HD212097	22h 16m.7	+27°50'	"	"	"	65°F	0:16	0:23	C	0h 02m E
33584	(π Cyg) HD [illegible]	21h 43m.1	+48°51'	"	"	"	65°F	0:34	0:38	A	0h .m W
33585	(ν Cyg) HD214923	22h 37m.0	+39°42'	"	"	"	64°F	0:48	0:55	B	0h .m W
33586	(ι And) HD222173	23h 33m.2	+42°43'	"	"	"	64°F	1:04	1:09	C	1h .m E
33587	(ω Aqr) HD222661	23h 37m.5	−15°06'	"	"	"	64°F	1:20	1:37	A	0h .m E
33588	(χ Peg) HD 886	00h 05m.1	+14°38'	"	"	"	63°F	2:26	2:28	B	0h .m W
33589	"	"	"	"	"	"	63°F	2:35	2:37	C	0h .m W
33590	(β Cas) HD3360	00h 31m.4	+53°21'	"	"	"	63°F	2:49	2:51	A	0h .m W

Dome Temp. 65°F

Focus .....

Dome Temp. .....

Transparency Conditions Early evening cloud cover cleared completely by about 20:30 EST. Stay clear remainder of night. Haze on horizon.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0:58	A	$1^h13^m W$	+46°05'	~2-3"	3.62	B3V	18-18	Bp Prog.	40/19	Comp. star	(GUIDING) FINE
1:06	B	$0^h10^m E$	+34°26'	"	4.86	B3IV	18-18	"	100/47	" (Pwd. very uneven exposure) (BROKEN 2 pc.)	BROKEN FINE
1:03	C	$0^h27^m W$	+34°26'	"	"	"	18-18	"	100/47	"	FINE
1:20	A	$0^h16^m W$	+77°40'	"	4.33	B9III	18-18	"	100/47	Comp star	FINE
3:02	B	$0^h38^m W$	-12°46'	~4"	4.70	B9V	18-21	"	100/46	" (Plates from here on are from fresh (2) packet) No 2.	FINE
1:23	C	$1^h40^m W$	-1°17'	~3"	4.28	B5III	18-18	"	100/45	"	FINE
21:47	A	$2^h07^m W$	-7°01'	~3"	4.95	B0.5III	18-18	"	100/45	MK Std	FINE
2:05	B	$0^h20^m E$	-1°28'	~3"	3.78	B9III	19-18	"	100/45	Comp star	(GUIDING) FINE
2:17	C	$0^h02^m E$	+28°15'	~2"	4.83	B8V	18-18	"	100/45	"	FINE
2:28	A	$0^h17^m W$	+49°14'	~3"	4.08	B3III	18-18	"	100/45	"	U.SC. STR
2:55	B	$0^h10^m W$	+40°06'	~2"	5.10	B2III	20-16	"	100/45	MK Std.	FINE
2:59	C	$0^h32^m E$	+43°08'	~2"	4.18	B8V	18-18	"	100/45	MK Std	(GUIDING) FINE
3:37	A	$0^h08^m E$	-14°38'	~3"	4.44	B9.5V	18-18	"	100/47	MK Std.	U.SC. CUR
3:20	B	$0^h13^m W$	+15°06'	~3"	2.60	B2IV	18-18	"	40/16	MK Std.	SC. STR
3:37	C	$0^h20^m W$	+15°06'	~3"	"	"	20-16	"	40/18	MK Std.	STRONG
3:54	A	$0^h12^m W$	+53°47'	~3'	3.41	B2V	24-12	"	40/17	MK Std.	(GUIDING) STRONG

Mon-Tues

Date Aug 24-25/1970 mth **Observer** BW **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33591	(5 Cas) HD 3360	$0^h 31.^m4$	+51°21'	G17	IIaO	9L	63°F	2:57	3:00	B	0^h
33592	(τ And) HD 10205	$01^h 34.^m7$	+40°04'	"	"	"	63°F	3:11	3:18	C	
33593	(ι Cet) HD 17081	$02^h 39.^m4$	−14°17'	"	"	"	62°F	3:32	3:46	A	
33594	(Vo Tau) HD 23408	$03^h 39.^m9$	+24°03'	"	"	"	61°F	4:26	4:30	C	
33595	HD 21478	$02^h 20.^m9$	+45°43'	"	"	"	61°F	4:38	4:45	A	
33596	(Tau) HD 28856	$04^h 45.^m9$	+5°26'	"	"	"	61°F	4:51	4:55	B	
33596F					out-out/in-in					B	
33596 T1	calibration strip, wedge				IIaO	for plate		33575-33585			
T2		"				"		86-96			
	/										

Dome Temp.
Focus
Dome Temp.

Dome Temp. .....

Focus .....

Dome Temp. ...60° F.....

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
$0^h 20^m W$	+53°47'	~3"	3.41	B2V	18-18	Bp. Prog -	40/17	MK Std.	SL. STRONG
$0^h 25^m E$	+40°28'	~3"	4.76	B8IV	18-18	"	100/45	Comp. Star	(GUIDING) FINE
$1^h 02^m E$	−13°55'	~3"	4.10	B7V	18-18	"	100/45	"	SL. WK FINE-
$1^h 18^m E$	+24°21'	~3"	3.79	B7III	18-18	"	100/45	"	FINE
$0^h 45^m E$	+49°00'	~3"	4.88	B3V	18-18	"	100/45	"	FINE
$1^h 59^m E$	+5°38'	~2"	3.52	B2III	21-15	"	100/44	MK Std.	FINE
					7-7	no filter		focus setting 5-8	VERY SLIGHT CENTER TO WORST
25 Aug / 70 / In WP-2 for 9.0 min @ 45° = / 2 FOK / I 9.									
				"					

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Date TUES/WED 25/26 AUG / 70 Observer mse – (Rm) → ALSO WORKING 24" Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	How taken End
33597	δ OPH HD 162714	17:47.3	−6° 07.2	G12	IIaO	9L	73°F	20:01	22:44	B	W2:52
33598	η AQL HD 187929	19:47.4	+0° 44.9	G12	IIaO	9L	70°F	22:54	23:07	B	W:15
33599	58 CYG HD 186688	19:40.8	+29° 01.4	G12	IIaO	9L	70°F	23:15	01:27	A	W3:3
33600	T VUL HD 198726	20:47.2	+27° 52.5	G12	IIaO	9L		01:35	02:52	B	W4:A
33601	δ CEPH HD 213306	22:25.5	+57° 54.1	G12	IIaO	9L		03:03	03:09	A	4:34
33602	HD 222207	23:33.5	+41° 57	G12	IIaO			03:23 03:19	04:30	B	W2:53
	~~HD 222454~~										
F1	focus test			G12	IIaOk		66°F			B	
T1	calibration strip wedge				IIaO	for flats		33598, 33600, 33601			
T2	"	"	"		IIaW		"	33597, 33599, 33602			

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Dome Temp. 69°F/H = 70%

Focus 5-R

Dome Temp. 60°F, H = 70%

Transparency Conditions SCATTERED CLOUDS TO START THEN CIRRUS TO ~02H

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Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	EXP. BOX #1 REMARKS	Quality
2:44	8	W2:52	−6° 5'	> 3"	7.01 - 7.83	~G	17-17-17	Rm CEPH	200/105	FIELD DRAWN	WEAK (GUIDING)
3:02	8	W1:15	+0° 59'	~ 3"	4.08 - 5.25	~G	45	Rm CEPH	200/130 +20		FINE
3:27	4	W3:43	+29° 15'	2"	6.8 - 7.66	~G	17-17-17	Rm CEPH	200/106	FIELD DRAWN	V. SL. WK
3:52	8	W4:00	+28° 12'	3"	5.42 - 6.42	~G	17-17-17	Rm CEPH	200/130	* CIRRUS ~0200	(GUIDING) FINE
4:17	4	W2:41	+53° 18'		4.1 - 5.2	~G	45	Rm CEPH	200/130	2 PLATES NUMBERED 83 & 84	SL. STRONG
4:38	8	W2:53	−42° 31'		6.71	AG	17-30	G1 Ap	200/~60	INTERMITTENT CLOUDS	(GUIDING) SL. WK
										HOPELESS — SOLID OVERCAST ~4:30	
	8										GOOD
3:04		MAP 2/9.0 min @ 68° F 2 AUG 1959									
3:04		"	15' "		"		"				
								* MAY BE FOGGED - CAPPER DIDN'T FULLY CLOSE			

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Date Aug 26/27 Wed Thurs **Observer** GH-Ha-SHE- **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33603	+36°3319	18h50	+36°47	60		13L	76F	-	Cloudy		
			gain multiplier switched on exp meter fell-off ½				Required - Hr				
			Ra Console knobs don't co-ork				Rejected - Hr				
			Balance day plate at high dec reserve								

Hollinger

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

...ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
...ds											
		meridian									

Date 1970 Aug 23/9 Fri-Sat Observer Tn-McA Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
~~33693~~	HD208174	21 49 4	~~+27 53~~	G-2	IIaO	9L		01 14		A	

Dome Temp. 44°F H=71%

Transparency Conditions cloudy

Focus .....

Dome Temp. .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
			~~128 17~~	~~2"-3~~	~~6.77~~	~~A3~~	~~17.~~	~~Cl Hy Proj~~	~~1/30~~	~~cloud gone up~~	
								Closed		01:30	

Date 1970 Aug 31/Sept 1 Mon/Tues **Observer** Tn-GL **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33602	HD 138406	$15^h 26^m.6$	+62° 05'	G12	IIa-1	9L	63°F	20:00	21:20	B
33604	AR Cas	23 25.4	+58 00	"	"	13L	"	21:42	22:34	C
33605	AR Cas	"	"	"	"	13L	58°F	22:37	22:44	A
33606	HD 198175	$20^h 43^m.6$	+42° 03'	G12	"	9S	56°F	22:58	00:20	B
33607	HD 222207	$23^h 33^m.5$	+41° 57'	"	"	9L	[illegible]	00:30	01:34	C
33608	[illegible]	[illegible]	[illegible]	"	"	"	"	01:40	01:46	A
33609	HD [illegible]	[illegible]	[illegible]	"	"	"		01:55	02:47	B
33610	HD 7374	01 08.8	+15 36	"	"	"	53°F	02:54	03:22	C
33611	HD 16127	$02^h 35^m.8$	+54° 41'	"	"	"	54°F	03:31	03:51	A
33612	HD 16855	$02^h 37^m.1$	+43° 07'	"	"	"		04:00	04:48	B
~~33613~~	~~HD 20902~~	~~03 17.2~~	~~+49 30~~	"	"	"				C
33612F	Focus			"	"	9				C
33612T1	calibration				IIIaO	for flats		33603 - 33612		

Dome Temp. 60°F / 55% H

Transparency Conditions Excellent (Poor seeing)

Focus .....

Dome Temp. 52°F / 74%

Dec TV system bum (Fuse) (also HV out on both)
Probable Power failure previous Day. S.T. out 1½ min

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04 13W	+61° 53′	2"-4"	6.79	A0	17-17-17	G1 Ap1 Am	200/125	S.T. SET AT 4:10 PM. MONDAY	FINE
02h 32E	+58°25′	2-4"	?	?	17-17-17		200/100	VISUAL COMPANION TO AR(illegible)	FINE
02h 22E	+58°25′	4	4.89	B3V	17-17-17		200/100		SL. STR
01h 58m W	+42° 21′	3"-4"	7.04	B9	17-17-17	G1 Ap1 Am	400/32.5	(tooth bar * to left ... off) per int from Comp.	SL. STR
00h 20m W	+42° 23′	"	6.77	A0	17-17-17	" "	400/250		FINE
01 40W	+58° 18′	2"-3"	+1.92	F5-02	25-25	Cephei	400/23		FINE
00 47m W	+31° 16′	"	6.78	A0	17-17-17	G1 Ap1 Am	400/250		SL. STR
00 32m W	+16 01	3"	5.80	B8	17-17-17	"	200/125		SL. STR
00 30m E	+55° 02′	2"-3"	5.61	B8	17-17-17	"	200/125		SL. STR
00 30 W	+42° 34′	"	6.72	A2	17-17-17	"	400/250		FINE
			2.77	F5V6		etd Vol	40/22	Dec Stuck	
					7/7	no f.l. @ ET			
									SL. CENTRE TO RED
1 Sept/70		Tu Wr-2/	9.0	min @	68°F/	220C	IT9		

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Date 1970 Sept 1/2 Tues/Wed Observer Tn - Hewbert Julian Day

Dome Temp. 6
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33613	TT Aql	$19^h\ 03^m\ 09^s$	+01° 06.5	G12	IIa-O	13s	62°	19:45	21:10	A	
33614	U Vul	19 32.3	+20° 06.6	G12	IIa-O	13s	60°	21:34	22:18	B	
33615	η Aql	19 47.4	+00° 44.9	"	"	9L	60°	22:24	22:31	C	
33616	S Sge	19 51.5	+16 22.2	"	"	"	59°F	22:40	23:28	A	
33617	SV Cyg	19 40.8	+29° 01.4	"	"	7	57°F	23:35	01:05	B	
33618	X Cyg	20 39.5	+35° 13.6	"	"	"	56°F	01:11	01:55	C	
33619	T Vul	20 47.2	+27° 52.5	"	"	"		02:09	02:36	A	
33620	S Cep	22 25.5	+57 54.2	"	"	"		02:48	02:52	C	
33621	HD 6833	1970 01 07.9	1970 +54 35	"	"	"		03:00	04:45	B	
33621 T.	calibration				IIaO for plates 33613 - 33621						

Dome Temp. 60°F H=61%

Focus .....

Dome Temp. 53° 63%

Transparency Conditions Excellent

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
9	A	0h 34W	+01° 19′	2″	7.29 - 9.08	F8-K0	17-17-17	Cepheid	400/300	prob 8-9 "	weak
2:12	B	01 08W	+20° 20′	1½-2′	7.8-9.0	F8-K0	17-17-17	"	400/200	prob near max	Fine
1:31	C	01 06W	+01° 01′	2″-3″	4.08 - 5.35	F6Ib-G4Ib	25-25	"	40/23		Fine
[illegible]	A	01 59W	+16° 39′	"	5.87-7.02	F1Ib-G5Ib	17-20-17	"	200/130	prob near min	Fine
1:05	B	03 42W	+29° 15′	"	6.8-7.66	F0-G1	17-17-17	"	200/100	prob at min cut short	sl weak
[illegible]	C	03 40W	+35° 34′	2½-3″	6.5-8.2	~G	17-17-17	"	400/260	near max	sl weak
1:36	A	04 13W	+28° 12′	"	5.82-6.82	F5 Ib-G0Ib	17-17-17	"	200/130		Fine guiding
2:52	C	02 50W	+58° 18′	2″	4.1-5.2	~G	25-25	"	40/23		Fine sl wavering
1:45	B	02 05W	+54° 04′	"	6.73	K1III	17-17-17	Bj Lum Reg	200/175		Fine
		MWP-2 / 9.0 min at 65° F / 2 40C / J9									

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Date Sept 4/5/78 Fri-Sat Observer Tn-McU Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33622	HD 4074	20h 18.5m	+27° 55'	0-12	IIaO	13-.3	68°	19 42	21 42	A	
33623	HD 4388	00 41.1	+30 25	"	"	"	65°F	22 50	00 58	B	
33624	HD 12029	01 53.0	+28° 54	"	"	"	64°F	01 05	03 33	C	
33625	HD 12929	02 01.5	+22 59	"	"	"	64°F	03 38	04 40	A	
33626	16 Tau	03 38.9	+23 58	"	"	9-.5	63°F	03 46	04 55	B	
33627	HD For (HD 22787)	03 36.0	+33 39	"	"	"		04 23	04 38	C	

Dome Temp. 66°F H=78%

Transparency Conditions ...some cloud...

Focus .....

Dome Temp. 61 H=85% should be 60 02E

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
~~00 55W~~	+28° 12'	2"	9.06	G3 III	8-8-8 7-7-8	SSV	800/300	Foc drawn	SL. WK
01 09E	+30° 51'	"	8.80	K3 III	8-8-8 8-8-8	"	800/400	"	SL. WK
00 12W	+29° 18'	"	8.76	K2 III	8-8-8 8-8-8	"	600/400	[illegible]	SL. WK
00 13W	+23 23	"	3.45	K2 III	25-25	Std Vel	40/18		FINE
00 57E	+24 16	"	5.40	B7 IV	17-17	Bk Bp mag.	200/10	Foc drawn (Checked by BW; O.K.)	FINE
0025E	+33 56	"	4.94	O5 V	17-17	"	200/40	heavy cloud at 9:10	SL STRONG
						DEC	CAMERA		
								Set 5 /	

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Date Sept 9/6 - Sat Sun Observer G.H - Tn Julian Day

Dome Temp. 62
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	How Angle End	D
33628	+36° 3319	18h 50	+36° 47	40	IIaO	13L	65°	19:33	19:39	H		
33629	+36° 3324	"	"	"	"	"	"	19:49	20:21	"		
33630	+36° 3314	"	"	"	"	"	64°	20:29	21:29	"		
33631	+36° 3315	"	"	"	"	"		21:35	22:00	"		
33632	HD 176502	18h 55.5	+36° 33	"	"	"		22:11	22:17	"		
33633	HD 13854	2h 9.9	+56° 36	"	"	"	62°	22:33	22:51	"		
33634	Stock 2-7	2h 12.9	+59° 08	"	"	"	61°F	23:35	0:01	"		
33635	Stock 2-43	"	"	"	"	"	60°F	00:10	01:09	"		
33636	Stock 2-160	"	"	"	"	"	60°F	01:24	01:58	"		
33637	Stock 2-40	"	"	"	"	"	"	02:10	02:44	"		
33638	Stock 2-56	"	"	"	"	"	59°	3:02	03:48	"		
33639	Stock 2-53	"	"	"	"	"	"	03:56	04:36	"		
33640	HD 13854	2h 9.9	+56° 36	"	"	"	58°	04:46	04:54	"		

Dome Temp. 62°F H=67%

Transparency Conditions very good

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Focus .....

Dome Temp. 58°F

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		0h35E	+37°05	1-2	6.0	[illegible]	3-3-3	GH alcohol	200/50	F=34 [illegible]	fine
9 21		0h10W	+36°45	1-11	8.0	B9	3-6	"	400/50		good, fine
11:39		01 17W	+36°56	"	8.7	A0	3-3-3	"	800/98		good
12:00		01 48W	+36° 45'	"	7.5	B5	3-3-3	"	400/50		fine
12:17		02 00W	+40° 42'	"	6.0	B5	3-6	B-stalcol	200/25		OK guiding
		0433E	+57°02'	4	6.2	B1	3-3-3	B-stalcol	200/25	F=33	good
		0326E	+59° 51'	"	7.0	[illegible]	3-3-3	GH alcohol	400/72		fine, [illegible]
		0226E	+59°0411	2"	8.8	G5	3-3-3	"	400/75		poor, good
1:38		0137E	+59° 53'	2"	8.2	G8	3-3-3	"	400/85		fine
1:47		0045E	+59°50'	"	8.5	[illegible]	3-3-3	"	400/50		OK, wks
1:49		0018W	+59 18	"	8.3	B?	3-3-3	"	400/50	F=32	fine - wk
1:54		0108W	+59° 22	"	8.9	B?	3-3-3	"	400/50		fine - wk
		0121W	+57°02	"	8.2	B1	3-	B-stalcol	200/25		good

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Date Sept 6/7 1912 SUN/MON **Observer** G.L.Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33641	HD 179218	19 06.6	+15 37'	〃	IaO	9-.5		19:55	22:1[illegible]	A	[illegible]
[illegible]	HD 201855	21h 07m.2	+2[illegible]° 09'	〃	〃	〃	66°F	22.20	23:58	B	[illegible]
33643	HD 224416	22h 35m.3	+44° 31'	〃	〃	〃	69°F	00:06	01:58	C	[illegible]
33644	HD 11336	01h 45m.4	+44° 19'	〃	〃	〃		02.08	03:56	B	[illegible]
33645	HD 14688	02 17.1	+16 25	〃	〃	〃		04:01	05:03	A	[illegible]
33645F	Focus			〃	〃	〃	63°F			B	

Dome Temp. 64°F - 67%H

Transparency Conditions cloudy then Excellent

Focus .....

Dome Temp. 60°F 72%

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		01h 51m W	+15° 41'	1-2"	7.13	B9	17-17-17	[illegible]	420/280		
3:58	B	01 33 W	+27° 30'	"	7.56	A0	17-17-17	"	400/250		FINE
1:53	C	01 06 W	+39 58	"	7.45	A0	17-17-17	"	400/250		FINE
2:56	B	0052 W	+44 44	"	7.43	B8	17-17-17	"	400/250	[illegible]	FINE
6:03	A	01 29 W	+16 48	2"	6.78	A2	17-17-17	"	200/100		FINE
			[illegible]				7/7	no filter			(GOOD)

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Date Sept 7/8 1920 Mon-Tues **Observer** G.I.-T.n **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33646	HD 164858	$17^h 58^m.3$	+45° 21'	G12	IIaO	9-5		19:32	22:28	A	
33647	HD 204428	21 23.4	+52 28	"	"	"	62°F	22:40	23:16	B	
33648	HD 208174	21 49.4	+27 53	"	"	"	61°F	23:23	00:33	C	
33649	HD 216607	$23^h 35^m.2$	+63° 10'	"	"	"	"	00:44	01:54	A	
33649F	Focus			"	"	"	61°F			B	
33649 T1	calibration	slit wedge			IIaO	for	plates	33641-33643, 33645 33622-33627,			
T2	"	"	"		"		"	33644, 33646-33649			

Dome Temp.
Focus
Dome Temp.

Dome Temp. 61°F H= 67%

Transparency Conditions Haze then Very Good

Focus .....

Dome Temp. 55°F / 91.5% H

01:30 Low cloud. fast moving from East

H=91%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0318W	+45° 24'	12"	7.42	A1	17-17-17	G1 [illegible]	400/250		FINE
0038W	+52° 49'	2-3"	5.90	B8	17-17-17	"	200/125		U.SL. STR
01h 33mW	+28 16	"	6.77	A3	17-17-17	"	200/125		FINE
01h 06mW	+63 36	2"	6.91	A3	17-17-17	"	200/109	cloud	SL WK
					7/7	no filter			SL. CENTRO TO DISC.
NGC 2/9.0 min @ 68°F					/240 c/s 9		9 Sept 70		
			"				9 Sept 70		

Date Sept 9/10 Observer GH-Ri Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33650	IC 4756-1	$18^h 34.6$	$+05^\circ 32$	G40	IIaO	13L	70°F	7:44	8:06	A	
33651	IC 4756-15	"	"	"	"	"	70°F	8:16		A	
33651	$+36^\circ 3319$	18 50.0	$+36^\circ 47$	"	"	"		8'42	8:50	A	
33652	$+36^\circ 3307$	"	"	"	"	"	69°F	8:55	9:01	A	
33652	$+36^\circ 3314$	"	"	"	"			29:05	21:53	A-	

Dome Temp. 66°F H79%

Focus .....

Dome Temp. .....

Transparency Conditions .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		0h23 W	+40°43'	2"	7.2	F0	3-3-3	GH Cl.	400/75	setting 35	ok
				"	7.0	B	3-	"	500/50	very hazy Cl.	
0		0h54 W	+36°54	"	5.96	M4II	3-3-3	GH Cl	400/120	Humid 51%	good
		1h55 W	+36°58	"	5.5	B?	3-3-3	"	200/25		ok Hazy
		1457W		"	5.7	A0	3-3-4	"	500/36	capped for 4 min. clouds @ 11:20	ok

Date Thurs: Fri Sept. 10-11 1970 Observer Bj - Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33654	HD 140573	15 42.7 1970	+6° 30.7 1970	G12	IIIa-o	9L	67°F	20:39	20:47	A
33655	HD 182293	19 21.7 1970	+20° 12.5 1970	G12	IIa-d	13L		20:56	22:50	B
33655Ri	[illegible]	[illegible]	[illegible]	G12	IIIa-o	9	60°F			B

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. 60°F 46%

Focus .....

Dome Temp. 58°F 65%

Transparency Conditions ..scattered clouds.....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04h 05m W	+06 35	3	2.66	K2 III	17-17-17	B; Lum Pros	40/32		
02h 30m W	+20 15	3	7.14	K3 III	17-17-17	" " "	800/342	clouded out	WEAK SL. CTOR
					7-7	— filter			

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Date Fri. Sat Sept 11-12 1970 **Observer** West - R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33656	ADS 14893	21 16.5	+09° 55	G-12	IIaO	9L	65°F	19:30	20:53	A	01°22E
33657	ADS 14893	21 16.5	+09 55	G-12	IIaO	9L	65°F	20:55	22:02	B	00°18E
33658	HD 222368	23 34.8	+05 05	G-12	IIaO	9L	64°F	22:11	22:21	C	04°2E
33659	ADS 14893	21 16.5	+09 55	G-12	IIaO	9L	64°F	22.28	22:34	A	01°2W
33660	ADS 14893	21 16.5	+09 55	G12	IIaO	9L	63°F	23:36	01:00	B	02°4W
33661	ADS 14893	21 16.5	+09 55	G12	IIaO	9L	60°F	01.03	02:36	C	04°2W
33662	HD 222368	23 34.8	+05 05	G12	IIaO	9L	59°F	02:42	02:53	A	02°2W
33663	ζ Ceti	02 34.8	-12 18	G12	IIaO	9L	59°F	03:00	03:22	B	00°04E
33664	ζ Ceti	02 34.8	-12 18	G12	IIaO	9L		03:25	03:48	C	00°6W
33665	HD 22484	03 31.7	+00 05	G12	IIaO	9L	58F	03:55	04:09	A	0°10E
33666	1 Geminirum	05 58.0	+23 16	G12	IIaO	9L		04:19	04:34	B	03°0E
33667	1 Geminirum	05 58.0	+23 16	G12	IIaO	9L		04:42	04:52	C	03°2E
33668	M Orionis	05 57.1	+09 39	G12	IIaO	9L	58°F	04:58	05:08	A	0°46E
33669	β Geminorum	07 39.3	+28 13	G12	IIaO	9L		05:14	05:16	B	03°2E
33669F1	focus test	out out / in in		G-12	IIaO	9	58°F			B	

Dome Temp.
Focus
Dome Temp.

Dome Temp. 61°F H-56%

Focus .....

Dome Temp. 54°F H 69%

Transparency Conditions ..... Excellent night .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01h22E	+10° 16	2	6.75	F8V	17-17-17	Wash Spect. Bin	400/260	exposed box #2	WEAK
00h13E	+10 16	2	6.75	F8V	17-17-17	Wash Spect. Bin	400/260		WEAK
02h12E	+05 32	3	4.3	F8V	17-17-17	Wash Std Vel	200/130		(SL.) STRONG
01h20W	+10 16	2	6.75	F8V	17-17-17	Wash Spect. Bin	400/260		FINE
02h45W	+10 16	2	6.75	F8V	17-17-17	Wash Spect. Bin.	400/260		FINE
04h22W	+10° 16'	2-3	6.75	F8V	17-17-17	Wash Spect Bin.	400/250		FINE
02h20W	+05° 32'	2	4.3	F8V	17-17-17	Wash Std Vel	200/130		U.SL.STR
00h09E	-11° 56'	2	4.5	F5V	17-17-17	WashSpect.Bin.	200/130		U.SL.STR
00h16W	-11° 56'	2	4.5	F5V	17-17-17	" " "	200/130		U.SL.STR
00h20E	+00° 23'	2	4.5	dF9	17-17-17	" Std Vel	200/130		SL.STR
02h21E	+23 20		4.5	gG5	17-17-17	" Spect Bin.	200/130		FINE
02h04E	"		4.5	gG5	17-17-17	" " "	200/130		FINE
01h46E	+09 43		4.4	Am	17-17-17	" " "	200/100		FINE
03h21E	+28 07		1.21	K0III	25-25	" Std Vel	20/20		SL.STR
					7-7	no filter			GOOD

95 Visitors till 21:30

Date Sat-Sun Sept 12-13 1970 Observer West-Ta Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33670	ADS 14893	21 16.5	+09°55'	G-12	IIa-O	9-.5	64°F	21·43	23:33	A	1·23W
33670F	FOCUS	Test		"	"	9	64°F	-		B	
33671	HD 222368	23h34.8	+05° 05'	"	"	9-.5		23·53	00·03	C	00·26E
~~33672~~	~~C (T1)~~	~~02 34.8~~	~~-12° 18'~~	~~"~~	~~"~~	~~"~~		00:20	00·52	~~A~~	~~02.14E~~
33672 T1	calibration	step wedge for plates				33656 -	33666		14 Sept		2·00 2/
T2	"	"	"	"		33654 - 33655,		33667 -	33672		

Dome Temp. 6
Focus
Dome Temp.

Dome Temp. 60° 72°

Focus .....

Dome Temp. .....

Transparency Conditions Clear but cloud at 23:30

Exp Meter bad. Probably mirror alignment because count rate not uniform along slit. *

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
23:53	A	1:23W	+10°16'	1-2"	V=8.75	F8V	17-17-17	WEST SPECT. SUN	400/130??	estimated exp meter wrong	WEAK
	B		in in/out out				7/7	no filter			GOOD
0002	C	00:26E	+05°31'	1-2"	V=4.3	F8V	25-25	West stdvel	40/21?		FINE
0037	A	02:31E	+11°54'	3"	V=4.3	F5V	12	West spatfin	400/	CLSED 00:30 CLOUD OPEN 00:47	GUIDING? * SL. WK
								[PLATES 33656 - 33671 TAKEN 3Y WEST]			
twilight		New Cup. 2/ 9.0 min @			68°F /		240 < 1 T 9				
3672			"							* POSSIBLY DUST COVER NOT ROTATED FULLY OPEN DURING 1ST OPENING UP PROCEDURE	

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WED. THUR

Date SEPT 16-17 Observer Ea Bj Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33673	HD 182293	19 21 1970 7	+20° 12.5 1970	G12	IIaO	9L	62°F	20:10	00:22	B	1115
33673 T1	calibration				IIaO	for #	33673		17 Sept		1112

Dome Temp. 71° 58%

Focus ....

Dome Temp. ....

Transparency Conditions Scattered clouds

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.		REMARKS	Quality
22	[illegible]	4 : 25	+20 18	3"	8.0	K 3 III	17-17-	Bj Lum Prog.	400/277		Clouds.	SL. WK
Sept.		mWP-2/ 15 min @ 68°F /270 c -59										

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WHERE IS THE NIGTH OBSERVER?

Date FRID/SAT. SEPT. 18/19 1970 Observer GZ Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33674	β Ari	01 49.1	+20 19	G12	IIa-o	9L	59°F	22 33 (a)	22 38	A
33675	"	"	"	"	"	9L	"	23 24 (b)	23 28	B
33676	HD 197572	20 39.5	+35 14	"	"	9L	58°F	23 55	00 57	C

Dome Temp. 56
Focus
Dome Temp. 52

Hour Angle End
05 39 E
01 11 E
02 31 E

Dome Temp. 56°F H=87%

Focus .....

Dome Temp. 54°F H=87%

Transparency Conditions ..... CLEARING → CLOUDY

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		03 38 E	+20 45	1-2	2.7	A5	51	ECL. BIN		EXP. METER NOT WORKING	WEAK COMP SL. STR.
		02 48 E	+20 45	"	"	"	25/25	"	20/10	O.K.	WEAK COMP SL. STR. (VERY)
		03 52 W	+35 35	"	6.5-8.2	F7-G5	17-34	CEPHEID P.	400/53	COMPLETELY CLOUDY (OFTEN FIELD DRAWN — CLOUDY	WEAK ↗
											WEAK FR
							CLOUDY ! CLOSED UP			AT 1:45	
								NOT A VERY PRODUCTIVE NIGTH DUE TO :			
						O.K.		1) METER NOT WORKING AT THE BEGINNING			
								2) TROUBLE WITH DEC. CLAMP			
								3) SIDERAL TIME CLOCK ... OUT BY 4m			
								4) NO NIGTH OBS.			

Public Info, 40, 42 40/75

Date SAT./SUN. SEPT. 19/20 1970 **Observer** ~~G.E., T.~~ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33677	β Ari	01 49.1	+20 19	G12	IIa-o	9L	64°F	21 02 (3)	21 10	A	05 30E
33678	HD 197512	20 39.5	+35 14	"	"	9L	"	21 28	22 13	B	0 [illegible]
33679	β Ari	01 49.1	+20 19	"	"	9L	63°F	22:19 (4)	22:23	C	03 30E
33680	HD 198726	20 47.2	+27 53	"	"	9L	"	22:31	22:37	A	[illegible]
33681	β Ari	01 49.1	+20 19	"	"	9L	"	23:03 (3)	23:06	B	[illegible]
33682	HD 2019	00 19.4	+30 49	"	"	9L	60°F	23:11	00:11	C	00 34E
33683	β Ari	01 49.1	+20 19	"	"	9L	"	00:14 (3)	00:17	A	[illegible]
33684	HD 4388	00 41.1	+30 25	"	"	13S	"	00:23	01 41	B	[illegible]
33685	β Ari	01 49.1	+20 19	"	"	9L	"	01:45 (4)	01 49	C	00 34E
33686	HD 14164	2° 19.7	+29 26	"	"	13S	"	01:55	03:19	A	00 34W
33687	β Ari	01 49.1	+20 19	"	"	9L	"	03:25 (4)	03:29	B	01 13W
33688	HD 3963	05 01.8	+26 12	"	"	13S	"	03:38	04:48	A	00 46E

Dome Temp.
Focus
Dome Temp.

Dome Temp. 60°F H=77%

Focus .....

Dome Temp. 56°F H=93%

Transparency Conditions ..... EXCELLENT .....
INCREASING HAZE AT 3h
FOG AT 3h45 → H=71%

Ending Time EST	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
21 10	A	05 03 E	+20 45	1-2"	2.7	A5	25-26	ECL. BIN	20/13		SL. STR
22 14	B	01 10 W	+35 34	1-2"	6.5/8.2	F7-G8	17-17-17	CEPHEID P.	400/260		(GUIDING) FINE
2 33		03 52 E	+20 46	"	2.7	A5	25-25	ECL. BIN	20/13		(GUIDING) FINE
2 16		01 46 W	+28 13	~1"	5.8-6.5	F5-G0	17-17-17	CEPHEID P.	400/260		FINE
2 56		03 07 E	+20 46	"	2.7	A5	25-25	ECL. BIN.	20/13		STRONG
3 11		00 34 E	+31 17	"	6.78	Am	17-17-17	Am PROG.	400/250		(GUIDING) FINE
3 37	A	01 56 E	+20 46	"	2.7	A5	25-25	ECL. BIN.	20/13		STRONG
4 14	B	00 36 W	+30 50	1-2"	7.10	IO3III	8-7-8 7-8-8	S.S. VEL.	500/425	north following [illegible]	FINE
4 32		00 24 E	+20 45	"	2.7	A5	25-25	ECL. BIN.	20/13		STRONG
4 49	B	00 34 W	+29 48	~1"	8.96	IO3III	8-9-8- 7-8-8	S.S. VEL.	500/425		FINE
5 29	B	01 13 W	+20 45	"	2.7	A5	25-25	ECL. BIN.	20/13		SL. STR
5 48	A	00 40 E	+26 22	1"	8.36	G2V	7-8-7 7-15	S.S. VEL.	500/310	FW drawn cut short	
						FOG: MAIN BLDG NOT VISIBLE FROM DOME!!					

Date SUN/MON SEPT 20/21 1970 **Observer** Tn - GZ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle Exit
33689	β Ari	01 49.1	+20 19	G12	IIaO	9/0.5	65°F	20 11 (1)	20 28	A	05 E
33690	HD 186688	19 40.8	+29 01	"	"	13/03	"	20 41	22 27	B	01 35 W
33691	β Ari	01 49.1	+20 19	"	"	9/0.5	"	22 34 (3)	22 37	C	3 34 W
33692	HD 187127	19 51.5	+16 22	"	"	9/0.5	63°F	22 45	23 24	A	01 5 W
33693	β Ari	01 49.1	+20 19	"	"	9/0.5	"	23 59 (2)	00 01	B	02 11 E
33694	HD 2934	00 27.4	+27 01	"	"	9/0.5	"	00 14	00 38	C	01 11 E
33694F	Focus			"	"	9	62°F	.		B	
33694 71	step wedge				IIaO	for plates 33677 - 33687					2 W
72					IIaO	33688 - 33694, 33674 - 33676					

Dome Temp. 60° F H=86%

Focus .....

Dome Temp. 60°F H=88%

Transparency Conditions CLOUDY → GOOD → CLOUDY (etc-etc)

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	05 44 E	+30 46	~3"	2.7	A5	17-17-17	ECL. BIN.	200/130		FINE
	B	02 25 W	+29 16	1-2"	6.8-7.6	F0-G	17-17-17	CEPHEID P.	400/170	CLOUDS	FINE
	C	3 34 E	+20 45	4	2.7	A5	25-25	ECL. BIN.	10/13		V.SL. STR
	A	03 10 W	+16 38	4	5.87 7.02	F6 G5	17-34	CEPHEID P.	400/116	CLOUDS; CUT SHORT	VERY WEAK
	B	02 11 E	+20 44	4	2.7	A5	25-25	ECL. BIN.	20/13		SL. STR
	C	30 11 E	+27 30	4	6.54	Am	17-34	Am PROG.	400/65	CLOUDS; CUT SHORT	VERY WEAK
	B		in in/out alt				7/7	no filter			GOOD
		MWP-2 / 9.0 min @ 68° F / 2 FOC IT 9						/ 21 Aug 8/70			

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Date Sept 23-24 **Observer** G-H-T **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33675	HD 12354	2h 09.7	+66° 36	84	IIa-O	13L	64°	22h 02	22h 21	A	
33696	Stock 2-7	2h 07.7	+55° 48	"	"	"	63°	23h 06	23h 32	A	
33697	Stock 2-43	"	"	"	"	"	63°	23h 41	0h 50	A	
											9.0
			Focus Final		T=65°						
				Sec = 31-38		#15	HI-HS				

Dome Temp. 60°F

Focus –

Dome Temp. .....

Transparency Conditions partly cloudy hazy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3h59E	+56°58	3"	6.2	B1	3-3-3	CHR.	200/25	F=33	Quite FINE
2h54E	+59°53	"	7.0	F5	3-3-3	"	200/36	F=5 α=2' 8.5	FINE
1h28E	+59°06	"	8.4	G5	3-3-3	"	400/54	F=32 α=2'11.6 - much	Hazy WEAK
9.0 min @ 65° on mWP-2 / no calibration - 24 Sept 1970									

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Date Sept 25/26 1970 FRI/SAT Observer G.I - Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33698	HD 2924	00h 27m.4	+27° 01'	G12	IIaO	9L	67°F	23:20	00:46	A	00h 15m W
33699	HD 21223	03h 27m	+09° 02'	"	"	"		00:55	01:31	B	02h 00m E

Dome Temp.
Focus
Dome Temp.

Dome Temp. 63° F / 74% H

Transparency Conditions very hazy

Focus .....

Dome Temp. 60° 80%

cloud from SE at 02h.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	00h 16m W	+27° 30'	1"-3"	6.54	A3	17-17-17	G1 Aptm	400/250		(GUIDING) SL-WK
01:27	C	02h 00m E	+9° 23'	2"	5.59	B8	15-15-15	"	200/25		V. SL-WK

Date Sept 27/28 Sun-Mon **Observer** GH-Tm **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33700	IC4756 #1 pe	18 34 6	+05 22	G40	IIaO	13/1.5	56°F	19:04	19:34	A	
33701	IC4756-15	"	"	"	"	13/1.3	"	19:38	21:34	"	
33702	HD187691	19h46.2	+10°10	"	"	13/1.3	54°F	21:43	21:49	"	
33703	"	"	"	"	"	13/1.5	"	21:53	22:04	"	
33704	Stock 2-160	7h07.2	+51°48	"	"	13/1.5	53°F	22:31	23:00	"	
33705	Stock 2-90	"	"	"	"	"	50°F	01:56	02:46	"	
33705 T1	calibration	step wedge			IIaO	for plates		33698-33699			
		"			"						
		Focus tests		T=	56°F						
				Set	29-33	) #	1-5				

Dome Temp. 53°F 59% H

Transparency Conditions scu Hazed cloud thr' 3rd A.110

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1h03m W	+05 16'	2"-3"	7.2	F0Ib	3-3-3	Cluster Prog	400/75	set 31 α 1970 18 39.5	(GUIDING) FINE
3h05m W	+05 27	"	9.0	B	3-3-3	"	800/68	[illegible]	EXP. OK
2 08 W	+10° 23	3"	5.8	F8	3-3-3	RV Stock	200/22	set 30	SL. STR
2 23m	"	"	"	"	3-3-3	"	200/36	"	SL. STR
3h07 E	+59°54'	2-3	6.2	G8	3-3	Clusters	400/~~45~~ 43	" clouds in 1/10" [illegible]	SL. WK
0h43m W	+59 51'	2"	8.8	B	3-3-3	"	400/50	set 29	(GUIDING) FINE
mean 2	9.0 min @ 65°F	/	2 A0 c I 9					29 Sept 1970	
	"			2 A0 c I 10				"	

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Date Wed Thurs Sept 3 & 4 1991 Observer GH-RI Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33706	+36° 3314	18 50.0	+36 47	G40	IIaO	13L	54°F	19:07	20:07	A	
33707	+36° 3324	"	"	"	"	"	55°F	20:13	20:47	"	
33708	+36° 3315	"	"	"	"	"	52°F	20:53	21:15	"	
33709	+36° 3319	"	"	"	"	"	50°F	21:23	21:30	"	
33710	+36° 3307	"	"	"	"	"	51°F	21:36	21:40	D	
33711	Stock 2-160	02 07.2	+58 04 8	G40	IIaO	13L	50°F	00:19	01:19	A	
33712	-40	"	"	"	"	"	46°F	01:49	02:43	"	
							47°F				

Dome Temp.
Focus
Dome Temp.

Dome Temp. 500F 73%

Focus .....

Dome Temp. 430F 80%

Transparency Conditions .....

who changed the H.V to 700 V?

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1h35m	+36° 56	2-3	8.74	A0	2-3-3	6 H dwarfs	800/108	setting 30	fair
2h14m	+36° 46		7.99	B7	3-3-2	"	800/100		good
2h43m	+36° 45		7.54	B5	2-3-2	"	800/100	setting ~~29~~ 19	fair
2h57m			5.96	M4II	2-3-2	"	200/60		"
3h07m	+37° 00		5.48	B?	2-3		200/~~55~~ 8	ditto !!	"
0h38E	+59° 54		8.20	G8	2-2-2		800/160	setting 28	OK
0454W	+59 50		5.5	!	2-2-2		800/100	set 27	OK
		Clouds	!						

Date Thu Oct 1·2/70 Observer Hd Tow – Li Julian Day

Dome Temp. 4[illegible]
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33713	HD 204934	21 26 8	27 56	G12	IIaUB	13/03		21 08	00 15	B	[illegible]
33714	HD 219688	23 12·7	-9 44	"	IIao	9/0·5	50°F	00:44	01:11	A	[illegible]
										C	
33714 T1	calibration	step wedge			IIao	for plates 33213, 33214			2 Oct 70		[illegible]

Dome Temp. 48°F H=77%

Transparency Conditions Clouds at first

Focus .....

Dome Temp. ..... should be 3"10"W

Thick Cloud by 01h

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01.34 W	+28° 17'	1-2"	9.64	K III	8:87 8:15	S S V	800/180	2nd 22.00 - 2230	SL WK
02.20 W	-09 16	2-3"	4.39	B5 V	15-15-15	SPEC. BIN.	200/48	CUT SHORT CLOUDS	(GOOD ING) SL. WK
NWP. 2/	9.0 min @	68°F	/2		.19				

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Date Oct 2-3 '70 Fri-Sat Observer GL-Tm Julian Day

Dome Temp. 57
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End	D
33215	HD 199154	20 50·2	+47 53	G12	IIa O	9/5		20:54	21:45	A	01°.2 W	

Dome Temp. 53°F H=70%

Transparency Conditions Lots a cloud

Focus .....

Dome Temp. .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	01h 20m W	+48° 13'	~2"	7.23	A7	17-34	Ap ε Am	400/103	clouds	VERY WEAK

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Date 0ct 4/5 Sun-Mon **Observer** GH-Tn **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33716	+36° 3319	18h50.0	+36°47	6 40	IIaO	13/5	49°F	19:39	19:44	A	1hW
						clouds					
33717	Stock 2-7	2h07.2	+58°48	"	"	"	48°F	22:00	22:24	"	1hE
33718	Stock 2-100	"	"	"	"	"	"	22:33	23:25	"	2hE
33719	HD 13[illegible]	2h05.7	+56°36	"	"	"	47°F	23:52	0h02	"	1hE
								More 540			
33720	GC 2243			G12	IIaO	9/5		01:01	01:05	C	0h3E
33721	HD 145	01 01.2	+40 21	"	"	"		01:38	03:38	A	3hW
33722	GC 5605			"	"	"	44°F	03:59	04:02	B	0h05W
33723	α Tri			"	"	"	"	04:16	04:20	C	03:55W
33724	λ Tau			"	"	"		04:25	04:29	A	01:57W
33725	HD 36591	05 27.6	-1°40'	"	"	"		04:50	05:18	B	00:25W
33726	GC 5605			"	"	"		05:23	05:27	C	01:30W
33727	λ Tau			"	"	"		05:31	05:39	A	2hW
33727 F	Focus			"	"	"	44°F			B	
33727 T1	calibration				IIaO	for plates 33715, 33720-33727					5 Cals

Dome Temp. 44°F 66% H

Focus .....

Dome Temp. 41°F 68% H

Transparency Conditions intermittent to total cloud

Strange comet like Blue cloud spotted in East SE at 4:30 till down, some shape & posn for 1hr

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		1h 26W	+36°54	2-3"	5.96	M/II	2-3-2	GH Cluster	200/60	Test = 28	fair
											OK
		3h 07E	+59°53	"	7.0	F5II	2-3-2	"	200/144		OK
		2h 16E	+59°55	"	5.00	G8	2-3-2	"	200/90		OK
		1h 36E	+56°56	3"	6.2	B1	2-3-2	B std vel	200/25	A FULL BOX	
		Planetary Nebula		—	G40			will be on Mon 2nd night — STILL IN THE DEEP FREEZE			
		0° 35E	+89°10'	2-3"	·	cF8v	22-22	G1001	40/23		FINE
		3°10W	+4C 48	2"	8.0	K0	15-15-15	"	400/320	Fld Drown	FINE
		0:05W		"	V 1.06	9K5 +M2	45	"	40/30		FINE
		03:05W	+29 29	"	V 3.6	F5	22-22	"	40/23		(GUIDING) STRONG
		01:07W	+12 28	"	V 3.9	B3	22-22	"	40/18		VERY STRONG
		00:25W	-01° 34'	"	5.15	B1V	22-22	Bp prog	40/18	cloud	(GUIDING) SL. WK
		01:30W	16° 34'	"	V 1.06	9K5 +M2	22-22	G1001	40/30	"	FINE
		02:17W	12°29'	"	3.9	B3	22-22	G1001	40/18	Dawn	STRONG
						-F		no filter		EXTREMELY WK	GOOD
		5 Cas 8/70	new -2/		9.0	min	@ 68°F / 240+.59				

119 ~ 120 visitors from waterloo about 2 hours, (looked at Ring Nebula)

Date Oct 6-7 Tues-Wed **Observer** Hd-T.n./Moore-T. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33728	HD 209813	22 01.0	+46°45'	G12	IIIaO	9/13	65°F	18:53	19:53	A	E 15°
33729	BD+47 781	03 06.4	+47 43	G40	IIIaO	13/15	62°F	22:10	23:44	A	E 2°.5
33730	HD 9774	01 30.5	+72 32	G12	IIIaO	9/15	"	00:05	01:18	C	W 0°.5
33731	HD 26965	04 10.7	-7.49	"	"	"	"	01:35	02:43	A	E 0°.9
33732	HD 13994	02 11.0	+57 04	"	"	"	"	03:03	03:57	B	W 2°.5
33733	HD 17506	02 43.4	55°29'	"	"	"	59	04:09	04:27	C	W 7°.4
~~33734~~	~~HD 160.8~~	02 29.4	+36°53'	"	"	"		04:35		A	
33733F	Focus			"	"	"	59°F			B	
33733 T1	calibration step wedge				IIIaO	for plates 33728, 33730 - 33733					

Dome Temp.
Focus
Dome Temp.

Dome Temp. 60° 92%

Focus .....

Dome Temp. 55° 90%

Transparency Conditions clear, then haze ... some cloud

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Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
7:5	A	E 1h 27m	+47° 08′	1"-2"	7.5	K0	15-15-15	ect Bin	400/186		~~SL.~~ WEAK
8:44	A	E 2h 45m	+48° 01′	2"	8.5	G5	2-3-3	Sp Bin	800/150	seeing fainter than 8.5	GUIDING SL. WK
11:18	C	W 0h 25m	+72° 55′	"	6.25	G8	15-15-15	Vis Bin	200/140	cloud at 0h 25m	SL. WK
2:43	A	E 0h 47m	−07° 38′	2"-3"	5.14	K0	15-15-15	Vis Bin	200/100		FINE
11:17	B	W 2h 20m	+57° 25	2"	7.04	G2	15-15-15	Vis Bin	400/280	seeing is deteriorating	FINE
4:27	C	W 2 24	+55° 49	"	5.41	K3	15-15-15	Vis Bin	200/180		FINE
	A	~~+37 14~~	~~1"-2"~~	~~7.10~~	~~K3~~	~~15-~~	"	~~200~~		cloud	
	B		in/in/out			7/7	no filter			NO CENTRE COMPARISON	?
11:33		7 Oct / 70	2 WR-21	9.0 min @	65° =	1.2	90	c. 15			

Date Oct 7-8 Wed-Thurs Observer Tu-DH/Fu Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33734	δ cas, HD 15	01 17.3	59 43	G12	IIaO	9/.5	63°	23:05	23:10	A	01 25 E
33735	ε cas			"	"	"	63°	23:33	23:37	C	01 27 E
33736	40 Per	03 36.0	33 39	"	"	"	"	00:08	00:30	B	02 25 E

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ..... very Hazy & Cloudy

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
23:10	A	01 25 E		1-2"		A5V	22-22	G1001	40/18		(GUIDING) SL. WK
2:37	C	01 27 E	+63 35	"		B3	22-22	"	40/18		(GUIDING) V. SL. WK
0:30	B	02 20 E	+33 54	"	4.94	05V	15-15-15	Bp	200/34	Cloud (cut short)	V. FEW WK

Date Oct 8-9 Thurs - Fri **Observer** Bl + Th **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33737	HD 1404	00 13.1	+36 14	G12	IIaO	9½.5	63°F	01:05	01:13	A	
33738	50 Cas	01 54.9	+71°56′	"	"	"	"	01:29	01:34	B	
33739	4 Per	01 55.6	+54°00′	"	"	"	"	01:45	01:57	C	
33740	71 Tau	04 20.7	+15°23′	"	"	"		02:06	02:14	A	
33741	HR 1403	04 22.1	+21°24′	"	"	"	61°F	02:54	03:40	A	
33742	π^2 Ori	04 45.2	+8°44′	"	"	"	"	03:48	03:56	C	
33743	9 Cam	04 49.1	+66°10′	"	"	"		04:12	04:23	B	
33743F	Focus			"	"	9	60°F			B	
33743 T1	calibration stig wedge				IIaO	for plates		33734 - 33743			

Dome Temp.
Focus
Dome Temp.

Dome Temp. 59°F 84% H

Focus

Dome Temp. 57°F 90%

Transparency Conditions Scattered cloud

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1:13	A	01 48 W	+36 42	2½-3"	4.6	A2V	22-22	Sp Bin	40/18		(LOW. & NG) SL. LUM
1:34	B	00 25 W	+72 18	"	4.06	A1V	22-22	"	40/18		(SL. LUM) FINE
1:57	C	50 50 W	+54 16	"	4.91	138 II	22-22	Sp - Bin	40/18		BLACK
2:-	A	~~01 18 E~~ ~~22 42~~ E	+15° 36'	2"	4.73	F0 II	22-22	Sp. Bin	40/18		FINE
2:40	A	00 05 W	+21° 37'	"	6—	Am	15-15-15	Sp - Bin	200/100	α = 02 26.3 some ton [illegible]	FINE
3:16	C	00 01 W	+8° 54'	"	4.32	A5 II	15-15-15	Sp - Bin	40/18	possible double exp	FINE
3:23	B	00 24 W	+66° 19'		4.3	09.5 Ia	15-15-15	!	200/90		SLIGHTLY STRONG
	B						2/7	no filter			SL. CENTRE TO VIOLET
		9 Set	NWW. 2/	9.0 min @	68°F			240c 1 J 9			

Date Oct 9-10 Fri-Sat Observer Tn-Wz Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33744	HD 209813	22 01.0	+46 45	G12	IIaO	13/.3		18:44	19:54	B	
33745	19 Lyr	19 07.9	+31 07	"	"	9/.5	63°F	20:17	20:55	C	
33746	HD 209515	21 58.9	+44 10	"	"	"	"	21:10	21:30	B	
33747	HD217477	22 55.9	+30 33	"	"	"	"	21:41	22 20	C	
33748	HD 220933	23 22.7	+24 37	"	"	"	"	22 30	23.00	C	
33749	HD 12447	01 56.8	+02 17	"	"	"	62°F	23 07	23:17	A	
33750	HD 11291	01 45.8	+50 18	"	"	"	"	23:32	00:10	B	
33751	HD 1048	00 09.8	+21 43	"	"	"	"	00 22	01:13	A	
33752	HD 20210	03 09.7	+34 19	"	"	"	"	01 25	02:11	A	
33753	AG Per	04 00.7	+33 11	"	"	"		02:19	03 20	C	
33754	HD 27650	04 16.6	+42 12	"	"	"	60°F	03:25	04 07	B	
~~33755~~	~~HD 5141.8~~	~~04 52.3~~	~~+42 27~~	~~"~~	~~"~~	~~"~~	~~"~~	04 22		A	

Dome Temp.
Focus
Dome Temp.

Dome Temp. 60°F H=83%

Focus .....

Dome Temp. 56°F H=75%

Transparency Conditions scattered cloud

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 13E	+47 07	2"	7.5	KO	~~7-7-7~~ 8-8-8	ecl Bin	400/220		Lwk
02 40W	+31 18	"	5.7	B9p	15-15-15	mag str prog	200/90	broken 2pc	BROKEN FINE
00 24W	+44 33	1½"	5.6	A0IV	15-15-15	"	200/90		(GUIDING) FINE
00 20W	+30 58	1"-2"	6.3	B8p	15-15-15	"	200/100		(GUIDING) FINE
00 30W	+25 03	"	5.8	A0p	15-15-15	"	200/100		FINE
~~01 47~~ 02 12E	+02 42	"	4.3	A0p	15-15-15	"	200/90		FINE
00 49E	+50 42	2"	5.6	B9p	15-15-15	"	200/100		FINE
01 55W	+22 11	3"	6.0	A1p	15-15-15	"	200/100		V.SL. WK
00 01E	+34 26	2-3"	6.2	A2m	15-15-15	"	200/100		(GUIDING) V.SL. WK
00 10 W	+33 25	"	6.6	B3	15-15-15	"	200/100	HD 25833	V.SL. WK
00 42W	+42 25	2"	6.0	A1p	15-15-15	"	200/100	Thin to heavy scattered cloud	SL. WK
	~~+42 25~~	~~3"~~	~~6.6~~	~~A0p~~	15	"	200/100	Clouds.	
	unpaired	P.H.	B	R:					

Date Oct 10-11 1st. Sun **Observer** G.I.-R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33755	HD 192907	20 123	+77° 25	G12	IIa0	9L	59°F	19:50	20:12	A	
33756	HD 208235	21h 53m9	+46° 23'	"	"	"	59°F	20:28	23:42	B	
[illegible]	HD 2019	00h 19m4	+30° 49'	"	"	"	53°F	23:48	01:02	C	
[illegible]	HD 17337	02h 41m2	+20° 17'	"	"	"		01:14	02:50	A	
[illegible]	HD 26571	04h 01m0	+22° 09'	"	"	"	50°F	02:54	03:24	B	
33760	HD 51418	06 52.2	+47° 26	"	"	"		04:06	05:44	C	
[illegible]	[illegible]						48°F			D	
33760 T.	calibration	strip wedge			IIa0	for plate		33751- 33760			
T2								33744- 33759			

Dome Temp.
Focus
Dome Temp.

Dome Temp. 56°F 69%
Focus 5-R
Dome Temp. 46°F 75%

Transparency Conditions scattered clouds clearing. clear after 2:30

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		01h 01m W	+74° 39	2-3	4.38	B9III	17-17-17	G1 Apgm	200/110		FINE
		02h 46m W	+46° 45	2-3	7.39	A2	17-17-17	"	800/500		FINE
		2h 44m W	-31° 13	2	6.78	A2	17-7-17	"	400/280		FENE
		01h 04m W	+29° 35	2	7.17	B9	17-17-17	"	400/250		FINE
		03h 45m W	+22° 20	2	6.11	B8	17-17-17	"	200/125		U.SL.WK
		00h 12m E	+42° 21	2	6.61	A0	17-17-17	"	200/125		FINE
							7-7	no filter		DAWN	CENTRE TO VIOLET
		-3 00 8 19 70	7h 04m-2/9.0 min				@ 61°	F/280 C/19			
					"						
								changed to 12 focus & 30-R			

Date Oct 19/12 Fri/SAT **Observer** G.L.H. **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33761	HL 18570	19h 56m 3	+29° 32'	G 16	[illegible]	13L	43°F	18h 34	21:00	A	
33762	HC 212936	20h 2m	+55° 56'	"	"	9L	39°F	21:08	22:12	B	
33763	HD 1662	00h 18m	+12° 18'	"	"	13L	38°F	22:18	00.14	C	
33764	HD 22330	03h 35m 3	+23° 23'	"	"	9L	36°F	00:25	01:29	A	
33765	HD 29488	04h 33m 5	+43° 55'	"	"	13L	36°F	1:14	02:54	B	
33766	HD 31126	05h 16m	+16° 01'	"	"	"	35°F	03:08	04:50	C	
33767	focus			"	"	9L				B	

Dome Temp. 40°F 58%

Focus 30-R

Dome Temp. .....

Transparency Conditions .....

clock 3 mins. out
repair yd side lamp of guider
turned clock drive heaters on

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2h 28m W	+29° 48	3"-4"	7.50	A0	17-17-17	Gr/Ap+m	800/560	[illegible]	FINE
1h 13m W	+56° 22	3-4"	6.37	B8	17-17-17	"	400/250		FINE U.SC. STR-
2h 22m N	+12° 38'	2½-3"	7.51	A3	17-17-17	"	400/560		FINE
0h 43m E	+28° 40	2½-3"	6.17	A7	17-17-17	"	400/250		FINE
[illegible]	+44° 05	2"-3"	7.90	B9	17-17-17	"	400/250	[illegible]	FINE
0h 57m W	+16° 06'	2"-3"	7.39	A0	17-17-17	"	400/220	[illegible]	U.SC. WK
					7-7	[illegible]		[illegible]	CENTRE TO VIOLET

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Date Sag Sun Oct 17-18 1970 **Observer** Wz - Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33767	HD 3322	00 31m 05s	+26° 42	G12	IIaO	9L	43°F	23:05	23:51	A
33768	HD 7546	01 10m 31s	+47° 33	G12	IIaO	9L	43°F	23:56	00:56	B
33769	HD 9996	01 33m 30s	+44° 34	G12	IIaO	9L		01.05	01:43	C
33770	HD 16004	02 29m 13s	+39° 14	G12	IIaO	9L	43°F	01.48	02:24	A
33771	HD 20155	03h 45m 43s	+12° 45′	G12	IIaO	9L		02:35	03:29	B
33772	HD 51418	06h 52m 20s	+42° 26′	G12	IIaO	9L	43°F	03:36	04:13	B
33773	HD 39317	05h 46m 41s	+14° 09′	G12	IIaO	9L		04:21	04:45	C
33774	HD 38478	05 41m 05s	+15° 47	G12	IIaO	9L		04:53	05:27	A
33774F1	focus test	on and / mini		G12	IIaO	9	44°F			B

Done Temp.
Focus
Done Temp.

Hour Angle End

Dome Temp. 40°F H 80%

Focus 3a R

Dome Temp. 40°F H 88%

Transparency Conditions Good after 23:00

fuse to clock drive blew

#132

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		0h45m W	+27° 09'	2	6.46	A0	17-17-17	mag std Prgs	200/100		FINE
		1h 15m W	+47° 57'		6.48	B9p	17-17-17	" " "	200/100		FINE
		1h 37m W	+45° 14'	2	6.80	B9p	17-17-17	" " "	200/100		FINE
		1h 23m W	+39° 36'	2	6.26	B9p	17-17-17	" " "	200/100		FINE
		1h 10m W	+13° 01'		6.16	B9p	17-17-17	" " "	200/100		FINE
		1h 12m E?	+42° 25'		6.61	A0p	17-17-17	" " "	200/100	Gl. star	FINE
		0h 25m W	+14° 15'	2	5.54	B9p	17-17-17	" " "	200/100		FINE
		1h 14m W	+15° 54'	2	5.88	B8p	17-17-17	" " "	200/100		FINE
							7-7-no filter				OK
										DAWN	

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Date Sun Mar 08 18:19 1970 **Observer** Ri - Den / G+ Ri **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33775	HD 217035	1970 22 55.7	1970 +62° 40'	G12	IIaO	13L	52°F	18:36	19:29	A	
33776	α Lyr.	1970 18 35.9	1970 +38 45	G12	IIaO	13L	50°F	21:45	21:52	B	
33777	HD 209813	22 01.0	+16° 43'	G12	IIaO	13-03	50°F	21:59	22:57	C	
33778	HD 217035	22 ~~55.6~~ 52.6	+62° ~~47~~ 19	G12	IIaO	13-0.3		23:01	00:14	A	
33778F1	focus test	22 00 / 22 10		G12	IIaO	9	46°F			B	
33778F2-5	focus test			G40	IaO	13-0.5	46°F			A	
33779	Stake2-56	2h6.5	+58° 58	"	"	"	"	00:45	01:36	A	
33780	Stake2-53	2h8.	+58° 15'	"	"	"	44°F	01:53	02:40	A	
33781	Stake2-47	2h6.4	+57° 46	"	"	"	44°F	02:45	03:35	A	
33782	Stake2-7	2h3.3	+59° 33	"	"	"	43°F	03:30	03:41	A	
33783	HD 13857	2h07.9	+56° 36	"	"	"	43°F	03:46	03:53	A	
33784	NGC 1663-101	1h42.9	+10° 45	"	"		42°F	04:07	05:17	A	

Dome Temp. 46°F H-82%

Focus 30-R

Dome Temp. 37°F H 76%

Transparency Conditions Clear clouded over at 19:20 clear up again a exhibit from shutter

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		1m55E	+62° 45'	3	Bo J	7.7	17-34	G 1001	400/54	clouded out	VERY VERY WEAK
		4m 51W	+38° 46		0.5	A0 II	25-25	"	20/10	some clouds clouded the star	GUIDING FINE
		2h 28m W	+47° 10	3'	7.5	K0	7-7-7 x 8-8	Ed. Bur.	40/200		FINE
		2m 50m W	+62° 45	3	7.7	130 II	15-15-15		40/120		FINE
							7-7	+ filter			U.S.C. TO VIOLET
							9 sec			set = 26-29	
		01h 00m W	+59° 17'	2	8.9	B	2-3-2	Gl+al.	800/100	setting 27	FINE
		02h 04m W	+58° 37	2	8.9	B	2-3-2	"	800/100	"	(GUIDING.) FINE
		2h 49m W	+59° 05	2	8.8	G5 II	2-3-2	"	800/170	"	FINE
		03h 0 8m W	+59° 52	2	7.0	F5 II	2-3-2	"	400/72	"	STRONG
		3h 13m W	+56° 58	2	6.2	B1	2-3-2	Gl+al	400/50	"	STRONG
		2h 36m W	+10° 55	2	9.6	G8 III	2-3-2	Gl+al	800/350	setting 26	FINE

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Date Mon: Tues Oct 19/20/70 **Observer** B/n - Tm/Jm: G.H **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33785	66 Oph	17 55.3	+04 22	G12	IIaO	9/5		18'18	18:26	A	02 08 W
33786	60 Ser	18 24.5	-02 03	"	"	"		18:36	19:32	B	02 31 W
33787	33 Aqr	22h01.0	-14° 21'	"	"	"	46°F	19:42	19:48	C	00 41 E
33788	17 Psc	23h34m8	+5°05'	"	"	"	"	20:02	20:08	B	01 55 E
33789	28 Cyg	20 05.7	+36 33	"	"	"	"	20:17	20:23	C	01 50 W
33790	HD217061	22h52m.7	+6.3°05'	"	"	9/3		20:51	23:09	A	01 45 W
33791	HD209813	22 01.0	46 45	"	"	"		23:16	00:16	B	03 43 W
33792	Stock 2-36	2h6.5	+58°58	G40	"	13/5	43°F	00:30	01:36	A	01 10 W
33793	Stock 2-43	2h6.9	+55°46	"	"	"	"	01:47	03:15	A	01 31 W
33794	Stock 2-7	2h33	+55°33	"	"	"	"	03:22	03:54	A	03 34 W
33795	HD 13[illegible]1	2h9.9	+56°36	"	"	"	"	03:59	04:13	A	03 34 W
33796	4 Aur	04 52.5	+37°44'	G12	"	9/5	42°F	04:34	04:48	A	01 26 W
33797	3 Mon	05 37.1	-10 36	"	"	"	"	04:54	05:30	B	01 05 W
33797F	Focus			"	"	9	41°F			B	

Dome Temp. 4
Focus 2
Dome Temp. 4

Dome Temp. 44°F H=69%

Focus 20-R

Dome Temp. 40°F H=80%

Transparency Conditions Excellent, Cloud after 1 AM

Sid Time slow 5 min (also EST wrong) resset using Alt-Air

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Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
18:26	A	02 08W	+04°25′	2-3"	4.8	B2Vc	22-22	sp Bin	40/18		SL. STR
19:32	B	02 37W	-01 56	"	6.5	KOIII	17-17-17	"	200/150		FINE
21:48	C	00 41E	-13 57	"	4.19	B8V	22-22	"	40/18		(GUIDING) FINE
22:58	B	01 55 E	+05 33	2"	4.34	F7I	22-22	PV Std	40/23		(GUIDING) FINE
23:32	C	01 50 W	+36 50	"	4.8	B3V	22-22	sp Bin	40/19		SL. STR
23:59	A	01 48W	+62 31	"	9.5	B1V	17-17-17	"	400/140		FINE
00:16	B	03 47W	+47 08	2-3"	7.5	KO	17-17-17	ecl Bin	400/220		(GUIDING) FINE
00:31	A	01 00 W	+59°17		8.9	B	2-3-2	GH cl.	450/50	Sol = 24	(GUIDING) FINE
00:15	A	02 40W	+59°03	2"	8.6	G5II	2-3-2	"	800/170	cloud	(GUIDING) FINE
23:54	A	03 22W	+59°52′	"	7.0	F5II	2-3-2	"	200/36		FINE
23:17	A	03 34W	+56°57′	"	6.2	B	2-3-2	Schaef	200/25		(GUIDING) SL. STR
24:41	A	01 28W	+37°51	1-2"	5	A0V	17-17-17	Bp Prog	200/95	cloud	FINE
25:20	A	01 05W	-10°33′	"	4.8	B5IV	17-17-17	"	200/100	"	(GUIDING) FINE
		in in / out out					7/7	no filter			SL. EXTRA TWINKLE

137

Date..... Observer..... Julian Day.....

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33797 T1	calibration	strip wedge	for plate 33761 - 33766,				33785 - 33788		21 Oct		
33797 T2			33789 - 33791, 33796,				33797		4		
33797 T3			33767 - 33776						4		
33797 T4			33777, 33778						4		
33797	F2	23 Oct (G.H.)		G40		T =	11.6 °C	focus	31		
	F3								32		
	F4								33		

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2 Oct		mcwp-2	19.0 min @ 68°F / 20°C								
						"					
						"					
						"					
								changed focus (6 12) @ 50.2			
31											
32											
33											

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Date Oct 23/24/70 Fri-Sat **Observer** Bln-Ta **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33798	66 Oph	17h 55m.3	+4°22'	G12	IIa-O	9/.5	57°	18:10	18:28	A	
33799	17 Aql	19h 00m.7	+13°43'	G12	IIa-O	"	56°F	18:35	18:37	B	
33800	16 Aql	19h 01m.0	−5°02'	"	"	"	"	18:45	18:51	C	
33801	67 Aql	20h 09m.7	+14°54'	"	"	"		18:57	19:13	A	
33802	HD192685	20h 11m.0	+25°17'	"	"	"	"	19:23	19:33	B	
33803	28 Cyg	20h 05m.7	+36°33'	"	"	"	"	19:39	19:49	C	
33804	31 Cyg	20h 43m.5	+36°07'	"	"	"	56°F	19:54	20:00	A	
33805	58 Cyg	20h 53m.5	+46°47'	"	"	"		20:09	20:15	C	
33806	33 Aql	22h 01m.0	−10°21'	"	"	"		20:22	20:34	B	
33807	26 Peg	22h 05m.3	+5°42'	"	"	"		20:39	20:43	C	
33808	17 Psc	23 34.8	+5°05	"	"	"		20:50	21:00	A	
33809	HD218154	23 00.6	+24 07	"	"	13/.5		21:10	22:26	B	
33810	HD209813	22 01.0	+46 45	"	"	13/.3	51°	22:31	00:05	A	
33811	25 And	00 13.1	+36 14	"	"	9/.5		00:11	00:19	C	
33812	HD 7519	5h 34m.1	+31°19'	"	"	"		00:34	01:26	B	
33813	50 Cas	01 54.9	+71 56	"	"	"		01:42	01:48	C	

Dome Temp.
Focus
Dome Temp.

Dome Temp. 52°F H=82% Transparency Conditions very hazy - fog @ 22h 140

Focus 50-R

Dome Temp. Sent OUT

Ending Time EST	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		02 20W	+4°27'	2"	4.79	B2Vc	17-15-15	Sp - Bin	200/190		
		01 23W	+13 54	"	3.01	A0V	20-20	Sp Bin	40/18		
	C	01 35 W	-4 52'	2"-3"	3.32	B9Vn	20-20	"	40/17		
	A	00 50 W	+15°13'	"	5.04	A2V	15-15-15	"	40/18		
		01 08 W	+25°35'	"	4.59	B3V	15-15-15	"	40/17		
	C	01 30 W	+36° 54'	"	4.92	B3Vc	15-15-15	"	40/17		
	A	01 04 W	+36° 27'	2"	4.42	B5V	20-20	"	40/17		
	C	01 07 W	+41° 06'	"	3.96	A0V	20-20	"	40/17		
	B	00 20 W	-13° 55'	"	4.18	B8V	15-15-15	"	40/20		
	C	00 25 W	+6° 09'	"	3.61	A2V	20-20	"	40/17		
	A	0048E	+5 31	"	4.6	F7V	20-20	PV std	40/33		
	B	01 11 W	+24 34	"	7.01	A0	15-15-15	Sp - Bin	400/300	fld drown fog	
	A	03 50 W	+17 09	2"3"	7.5	K0	15-15-15	Sp/Bin	400/220		
	C	01 53 W	+36 38	"	4.5k	A2V	15-15-15	Sp - Bin	40/18		
	B	02 22E	+31° 22'	"	6.0	B7V	15-15-15	Sp - Bin	200/100		
	C	01 38 W	+72°18'	"	4.1	A1V	15-15-15	"	40/18		

141 Pg # 2

Date Oct 25/30 **Observer** Bla-Tu **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33814	4 Per	1h 55m.6	+57°00	0.17	IIa-O	9/.5		01:53	02:03	A	0h 54m W
33815	9 Tri	2h 11m.4	+33°32'	"	"	"		02:06	02:14	B	1h 9m W
33816	23 Per	2h 52m.4	+39°16'	"	"	"		02:19	02:27	C	1h 33m W
33817	HD 21447	3h 22m.4	+55°06'	"	"	"		02:33	02:49	A	2h 0m W
33818	46 Per	3h 52m.5	+35°30'	"	"	"		03:00	03:06	B	2h 20m W
33819	9 Com	4 14.1	+26°10'	"	"	"	50°	03:13	03:19	C	2h 40m W
33820	3 Lep	5h 07m.6	-11°59'	"	"	"	"	03:27	03:43	A	3h 0m W
33821	4 Lep	5h 01m.6	-13°04	"	"	"		03:50	04:04	B	3h 20m W
33822	71 Tau	4h 20m.7	+15°23'	"	"	"	49°	04:09	04:21	C	3h 40m W
33823	2 Ori	4 45.2	+8°49	"	"	"	"	04:28	04:38	B	4h 0m W
33824	3 Mon	05 52.1	-10°56'	"	"	"		04:50	05:10	C	4h 20m W
33825	HD 51418	06 52.2	+42 26	"	"	"		05:18	06:02	A	4h 56m W
Looked at	K Cnc	It was very faint)						so faint	to do		so

Dome Temp. .....

Focus .....

Dome Temp. 45°F 67 20

Transparency Conditions ..... very good .....

Ending Time EST	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2:03	A	01 54W	-15°21'	2"	4.91	B5V	15-15-15	Sp-Bin	40/18		
	B	01 45W	+39°43'	"	4.06	A5V	15-15-15	"	40/18		
	C	01 20W	+39 34	"	4.6	A2V	15-15-15	"	40/17		
	A	01 11W	+55°24'	"	5.13	A1V	15-15-15	"	40/20		
3:26	B	01 00W	+35°44'	"	4.04	O7	20-20		40/17		
2:14	C	00 18W	+66°21'	"	4.3	O9.5V	20-20		40/18		
2:47	A	00 24W	-11°51'	3"	4.35	B8V	15-15-15	Sp Bin	40/20		
	B	00 43W	-12 55	"	4.36	B7V	15-15-15	"	40/18		
31	C	01 48W	+15 38	2"-3"	4.73	F0V	15-15-15	"	40/18		FINE
1:38	A	01 39W	+8°55	"	4.3	A0V	15-15-15	"	40/18		FINE
5:10	B	01 00W	+10°33'	"	4.73	B5V	15-15-15	Bpi Proj	40/18		FINE
4:02	A	00 56W	+42°24'	"	6.61	A0p	15-15-17	Apcm	200/75	Cut short Down (finally)	(GUIDING) FINE

Date Oct 21/25/30 Sat-Sun Observer Blu-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33826	17 Aql	19h 00.8	+13°43'	G-12	IIa-O	9/.5		18:11	18:15	A	
33827	HD213337	22h 03.3	+63°06'	"	"	"		18:25	18:57	B	
33829	HD213942	22h 05.1	+62°41'	"	"	13/.3	54°	19:09	19:41	C	
33830	HD217061	22h 51.8	+65° 05'	"	"	"	53°	20:01	22:13	A	
33829	33 Per	3h 17m.2	+49°30'	"	"	9/.5		22:31	22:34	B	
33831	25 And	00h 13.1	+36°14	"	"	"		22:49	23:18	C	
33832	50 Cas	1h 54m.9	+71°56'	"	"	"	52°F	23:24	23:38	A	
33832F	" Focus	"	"	"	"	9	52°F	"		B	
33833	46 Per	2h 52m.5	+35°30'	"	"	9/.5		02:30	02:42	A	
33834	9 Cam	4 44.1	+66 10	"	"	"		02:47	02:53	B	
33835	22 Per	2h 52.4	+39°16'	"	"	"		03:04	03:09	B	
33836	HD37519	5h 34.1	+31°18'	"	"	"	51°	03:14	03:40	C	
33837	2 Ori	4h 45m.2	+8° 44'	"	"	"		03:45	03:51	A	
33838	3 Lep	5h 07.6	-11°59'	"	"	"		03:59	04:11	B	
33839	4 Lep	5 08.6	-13°04'	"	"	"		04:15	04:23	C	
33840	65 Eri	4h 31m.6	-7°14'	"	"	"		04.28	04:36	A	

Dome Temp. 50° F 82%

Transparency Conditions hazy - cloud 400

Focus .....

Dome Temp. .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2:15	A	01 03W	+13° 54'	2"	3.01	A0Vnn	15-15-15	Sp-Bin	40/18		FAIR ING FINE
1:43	B	02 18E	+63° 32'	1"-2"	6.24	07	15-15-15	"	200/95		SL. WK
1:11	C	01 19E	+63° 04'	"	7.85	B0IV	15-15-15	"	400/140		FAIR ING SL WK
2:13	A	01 12W	+62° 31'	"	9.49	F5V	15-15-15	"	400/140		WEAK
1:11	B	02 43E	+49° 05'	"	2.27	F5V	20-20	RV Std	40/23	POOR	FAIR ING FINE
1:18	C	00 50W	+36° 32	"	4.58	A2V	15-15-15	Sp-Bin	40/20	cloud	FINE
3:38	A	00 30E	+72° 19	2	4.08	A1V	15-15-15	"	40/20		FINE
	B		in/out	out			7/7	no filter		USE SLIGHT CENTER TO RED	
2:42	A	00 39W	+35° 46'	2"	4.04	07	15-15-15	Sp Bin	200/90		V. SL. SPR
2:53	B	00 04E	+62° 20'	"	4.3	09.5V	20-20	"	40/18		
3:17	B	02 08W	+39° 34'	"	4.63	A2V	15-15-15	"	40/18		
3:40	C	00 04E	+31° 21'	"	6.03	B7V	15-15-15	"	200/100		
4:01	A	00 58W	+8° 53'	"	4.32	A0V	15-15-15	"	40/18		
4:11	B	00 55W	-11 51	2-3"	4.35	B8V	15-15-15	"	40/18		
4:27	C	01 06W	-12 55	"	4.26	B8V	15-15-15	"	40/18		
4:42	A	01 32W	-7° 16'	"	4.6	B2V	15-15-	"	40/18		

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Date Oct 24/25/30 **Observer** B.M. - Jr. **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33541	17 Lep	4h 00m.5	-16° 29'	G-12	IIa-O	9/5		04:02	04:58	B	
33842	HD 28226	4 22.1	-21 24	"	"	"	50°	05:03	05:33	C	

Dome Temp. .....

Focus .....

Dome Temp. 45°F 82%

Transparency Conditions .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
4:58	P	0050W	-18°27'	2-3"	5.16	12-pt M3 III	15-15-K	Sp. Bin	40/17		
5:17	C	0303W	+21°39'	2"	6.0	Am	15-15	"	200/100		

147 **Date** Oct 25/26/30 Sm/Km **Observer** Blu-Jm **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33843	66 Oph	17h55m.3	+4°22′	G-12	IIa-O	9/.5		18:05	18:13	A	02 11W
33844	28 Cyg	20h05m.7	+36°33′	"	"	"		18:17	18:26	B	00 14W
33845	33 Aql	22h01m.0	−14°21′	"	"	"		18:32	19:30	C	0036E
33846	67 Aql	20h05m.7	+14°54′	"	"	"		19:36	19:52	A	01 37W
33847	HD [illegible]	20h11m.0	+2°17′	"	"	"		19:57	20:03	B	01 14W
33848	34 Cyg	20h41m.5	+36°07′	"	"	"		20:08	20:16	C	01 [illegible]
33849	52 Cyg	20 53.5 20h55m.2	+40° 47′ +55°42′	"	"	"		20:27	20:31	A	01 33W 00 22W
33850	HD 213754	22h00m.6	+31°07′	"	"	13/.5		20:50	21:52	B	00 [illegible]
33851	HD 217537	23h03m.7	+63°06′	"	"	9/.5	51°	22:08	22:38	C	01 29W
33852	50 Cas	1h54m.9	+71°58′	"	"	"	"	22:46	22:52	A	01 10E
33853	4 Per	1 55.6	+54°00′	"	"	"		22:57	23:07	B	00 [illegible]
33854	35 Per	3 17.2	+49° 30′	"	IIaO hooked	"	50°	23:13	23:14	B	00 10E
33855	HD 21747	3 22.4	+55°06′	"	IIaO	"		23:21	23:31	C	01 [illegible]
33856	25 And	00 13m.1	+36° 14′	"	"	"		23:37	23:43	A	01 34W
33857	T Tri	2h11m.4	+37°23m	"	IIaO hooked	"		23:48	23:52	B	00 21E
33858	2 Per	2h53m.4	+39°16	"	"	"		23:57	00:03	C	00 56E

Dome Temp.
Focus
Dome Temp.

Dome Temp. 50°F 87%

Focus .....

Dome Temp. .....

Transparency Conditions Small clouds

148

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
19:??	A	02 11W	+4° 24'	2-3"	4.8	B2Ve	15-15-15	Sp Bin	40/19		FINE
19:26		00 14W	+36° 53'	2"	4.32	B5Ve	15-15-15	"	40/18		FINE
19:?0	C	0036E	-13° 7'	2" 3'	4.19	B9 II	15-15-15	"	40/20	cloud (18:40 - 19:??)	(SL. GUIDING) FINE
19:?2		01 37W	+15° 11'	2"	5.04	A2V	15-15-15	"	40/19		FINE
19:?3		01 46W	+25° 35'	"	4.57	B5V	15-15-15	"	40/19		U.SL.STR
19:??		01 28W	+36° 27'	"	4.42	B9II	15-15-15	"	40/18		U.SL.STR
19:?1		01 33W 0022W	+41° 08'	1"-2"	3.96	A0V	15-15-15	"	40/17	coords listed are wrong! -SAS/90	U.SL.STR
19:?2		00 46W	+24° 34'	V	7.01	A0	15-15-15	"	200/100	"	FINE
19:??		01 29W	+63 33	"	6.24	A0	15-15-15	"	200/95		FINE
19:5?		01 10E	+72° 21'	"	4.08	A5V	15-15-15	"	200/95		STRONG
21:07		00 56E	+54° 22'	"	4.9	B8V	15-15-15	"	40/18		FINE
19:??		02 10E	+49° 41'	"	2.27	F5Ib	20-20	REV STD	40/20		SL.STR
19:??	C	02 00E	+55° 24'	"	5.11	A1V	15-15-15	Sp-Bin	40/19		FINE
23:43	A	01 24W	+36° 40'	"	4.58	A2V	15-15-15	"	40/18		FINE
19:52	B	0026E	+34° 44'	"	4.10	A0V	15-15-15	"	40/17		FINE
20:03	C	0056E	+39° 35'	2"	4.63	A2V	15-15-15	"	40/17 ?		FINE

Pg #2

149 **Date** Oct 25/26 60 **Observer** L.A.-Th **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33859	4 Per	3h 52m 5	+35° 30′	5-12	IIaO baked	9.5		00:09	00:11	A	
33860	2 Per	4h 4m 2	+8° 44′	"	"	"		00:19	00:24	B	
33861	33 Per	3h 14m 7	+49° 55′	"		"		00:37	00:45	C	
33862	HD21278	3h 20m 9	+49° 43′	"	"			00:57	01:05	A	
33863	HD23226	4h 22m 1	+21° 24′	"		"	47°F	01:19	02:45	B	
33863F	Focus			"	IIaO	9	47°F			C	
33863 T1	calibration strip wedge for plate. 33811 - 33821								26 Oct		
T2	"		" 33822 - 33825; 33843 - 33849						27 ~~Oct~~ 28		
T3	"		" 33850 - 33853; 33855 33856						"		
T4	"		" 33826 - 33832						"		
T5	"		" 33809, 33810, 33839 - 33842						28 Oct		
T6	"		" 33798 - 33808						"		
T7			33863 - 33867						"		

Dome Temp. .....

Focus .....

Dome Temp. 45° F 82%

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0.47E	+35°44'	2	4.04	A7	15-15-15	2p-0.c	40/15		SL. STR
0 23E	+8°55'	"	4.32	A0V	15-15-15	"	40/17	Clouds	FINE
0 36E	+13°16'	"	5.07	A2V	15-15-15	"	40/17	(CLOUD FORMED)	FINE
0 23E	+17°59'	"	4.71	A3V	15-15-15	"	40/17		FINE
00 20W	+21°34'	2½"	5.99	Am	15-15-15	J1	200/20	Cloud again cut short	
—					7-7	no filter			
NCWP-2 / 9.0 min @			68°	F /	240 c I 10				
		"							
		"							
		"							
		"							
		"							

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Date Oct 27-28/Tues.-Wed. Observer Tn-St Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33864	HD 8538	$1^h 21.1$	59°45'	G12	IIaO	9/15	49°	01:10	01:14	A	1'58"
33865	NGC 1976	$5^h 30.5$	−5°27.6'	G12	IIaO	9/15	49	01:28	02:00	B	1'21E
33866	HD 37022 (C)	$5^h 30.4$	−5°27'	"	"	"		02:22	02:48	C	1'35E
33867	HD 30282	$04^h 41^m.08$	36°32.6'	"	"	13/13		03:22	05:30	B	1'04W

Dome Temp. 4
Focus
Dome Temp.

Dome Temp. 44°F H = 82%

Focus .....

Dome Temp. 42 86

Transparency Conditions ..... cloudy scattered

152

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1h 58m W	+60° 08'	2"-3"	2.8	A5	22-22	G1001	40/18		FINE
1 25 E	-05 22	"	"	H II	15-15-15	G1001	"		em WEAK
0 38 E	-05 23	2"-3"	=4	"	15-15-15	"	40/19		FINE
2 52 W	+36 45	1"-2"	=8	F VAR	15-15-15	"	400/112	cut short (cloud)	SL. WK

74" MIRROR ALUMINIZED OCT. 28/70

TELESCOPE OUT OF OPERATION FOR 1 NIGHT cloudy any more

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Date Nov 2-3/39 Mon-Tues **Observer** GH-Tn **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33868	NGC 1545 #3	04 13	+50 00	G40	Ilo	13.5	53°F	23;15	1;09	A	
33869	HD29557	04 34	+41 57	"	"	"	52°F	01 33	1;59	A	15E

Dome Temp. 50°F H=87%

Focus .....

Dome Temp. .....

Transparency Conditions scattered cloud

[Large, bright blue-red Fireball reported at 6:40 EST now 2]

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		ch 35 E	+50° 15'	2"	8.82	K5 III	3-3-3	cluster prog	800/20	setting 32 cloud	FINE
		0 05 E	+42° 05	1	7.7	32	3-3-3	std gal	400/25		FINE
								cloud!			
		NWC 2/ 9.0 min @			at °F / 2			I 10	4 200/20		

Date Wed Nov 4-5/70 Observer Hd - Bln-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33870	HD 209813	22 01.0	46 45	G12	IIaO	13/.4	45°F	18 03	19:01	A
33871	HD 12029	01 53.0	+28° 54	"	"	13/.3		19:11	20 5:7	B
33872	HD 14969	02 19.7	+29 26	"	"	"	41F	21:10	22 [illegible]	C
33872F	Focus Test			"	"	13	41°F			B
33873	4 Per	01 55.6	+54° 00'	"	"	9/.5		00:44	00:50	A
33874	9 Tri	02 11.4	+33° 23'	"	"	"		00:55	00:57	B
33875	22 Per	02 52.4	+39° 16'	"	"	"	43°F	01:01	01:41	C
33876	HR 1938	05 34.1	+31° 18'	"	"	"	41°F	03:47	04:13	B
33877	HD 62509	07 39.2	+28° 16'	"	"	"		04:18	04:34	C
33877T.	calibration	step wedge			IIaO	flats 33870 - 33877			5 hrs	

Dome Temp. 43°F H=70%

Transparency Conditions clear, some cloud mod cloud

Focus .....

Dome Temp. .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
7'01	A	00 25E	+47 09	2"	7.5	K0	15-15-15	NL 83	400/250		FINE
57	B	2 26E	+29 16	"	8.96	K2III	7-8-8 8-8-8	S. S. V.	800/332		SL. WK
	C	1 20E	+29 48	2"-3"	8.96	K3III	7-7-7 8-16	"	800/214	some cloud — Then solid *	WEAK
	D						7/7	no filter			GOOD
	A	01 29W	+54 24	F2"	4.89	B8V	15-15-15	Sp Bin	40/18		(GUIDING) SL-STR.
7	B	01 20W	+34 45	"	4.10	A0V	22-22	"	40/18		(GUIDING) FINE
41	C	01 24W	+39 37	"	4.63	A2V	15-15-15	"	40/200	cloud again	FINE
113	F	01 14W	+31°25'	3"	6.01	B7V	15-15-15	"	200/100		FINE
34	E	00 30E	+26°07'	"	2.1	1.0III	22-22	KV Std.	200/150	cloud	SL. STR
6m		mw 0.2	/ 12 min	@ .65°F		0 A0 < I/0					
				*		Anson		Please		give 33872 Long slant [illegible]	

Date Thurs-Fri Nov 5-6/70 **Observer** Th - Gz **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33878	HD 209813	22 01.0	+46 45	G12	IIa-O	13/3	40°F	20:38	22:10	A	02 49W
33879	88 Peg	00 08.1	+14 38	"	"	9/1.5	40°F	22:22	22:24	B	0 55W
33880	"	"	"	"	"	"	"	22:29	22:32	C	1 02W
33881	48 Aqr	22 16.5	-1 53	"	"	"	"	22:47	22:51	A	3 13W
33882	HD 35189	05 17.9	+16 36	"	"	"	"	23:08	23:40	B	0 00E
33883	HD 29104	04 29.8	+19 41	"	"	9/0.5	40°F	23:46	00:40	C	0 51E
33884	HD 33541	05 05.9	+73° 09	"	"	"		00:54	01:08	A	01 25E
33885	HD 37171	05 31.5	+10 58	"	"	"	39°F	01:17	02:14	B	0 38E
										C	
33885 +	calibration	strip wedge			IIa-O	plates	33878 - 33885		6 hrs		

Dome Temp. 4
Focus
Dome Temp. 3

Dome Temp. 40°F H=60%

Transparency Conditions scattered cloud

Focus

Dome Temp. 37°F H=70% (at HrL 02 20E & Dec 73° Dec would not hold for a while) Rotator??

23h → excellent

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2.10	A	02 49W	+47° 11′	2″	7.5	K0	15-15-15	eq/Rich	400/220	some cloud	FINE
2:24	B	0 55W	+15 04	〃	2.6	B2 V	15-30	Rapid	40/17		STRONG
2:32	C	1 02W	〃	〃	〃	〃	22-22	〃	40/18	cloud	(GUIDING) STRONG
2:41	A	3 13W	−1°30′	2½″	3.78	B9 II	22-22	〃	40/18		FINE
2:50	B	03 00E	+16 46	2″	6.09	A2 V	15-15-15	SPEC. BIN.	200/100		FINE
3:00	C	01:11E	+19 54	3″	6.56	F8	15-15-15	〃	200/130		FINE
3:11	A	01:25E	+73 19	2″	5.76	A0	15-15-15	〃	200/100		FINE
3:14	B	0:38E	+11 03	2″-3″	5.98	K5 III	15-15-15	〃	200/145	cloud cutout	FINE
4:00		NWP 2/9.0 min @ 68°F / 200 c I-0									

Date Fri - Sat Nov 6-7/70 Observer GL - Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33886	αAnd (HD358)	$0^h 03^m.2$	+28°32'	G12	IIa-O	13/65	46°F	21:50	21:51	B
33887	HD 21933	$03^h 27^m.1$	+9°02'	"	"	9/65	46°F	22:00	23:00	C
33888	88 Peg	$00\ 08^m.1$	+14°38	"	"	"	46°F	23:07	23:10	B
~~33889~~	17 And	~~23 33.2~~	~~+42 43~~	"	"	"		23:19	23:30	A
33902 T1	calibration strip wedge for flats			33886 - 33896						
T2		"		33897 - 33902						

Dome Temp. 4
Focus
Dome Temp.
Hour Angle End

Dome Temp. 44°F H=85% Transparency Conditions Scattered cloud 160

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0h 30m W	+28° 59'	2-3	1.98	B9p	22	G1 Apsim	40/17		(GUIDING) STRONG
1h 45m E	+ 9° 18'	2-3	5.59	B8	17-17-17	"	200/134	cloud	FINE
1h 45m W	+15° 07'	2	2.60	B8IV	22-22	Bp Prog	40/15		FINE
~~———~~	~~———~~	"	4.18	B8V	22	"	40/17	cloud	
10 Nov/1970 - mWO 2/9.0 mm @ 68° F/280 = 710									
				"					

Date Sun Mon Nov 8-9 1970 **Observer** Bl.-Ri/ GHR **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33889	HD 191610	20 05m43s	+36° 33'	G12	IIaO	9L	42°F	21:11	21:23	A	4°09W
33890	HD 213534	22h26.9	+29° 02'	"	"	"	"	21:34	22:18	B	02 4 W
33891	25 And	00 13.1	+36°14'	"	"	"	"	22:21	22:26	C	0°49 W
33892	9 Tri	02 11.9	+33°23'	"	"	"	"	22:29	22:32	A	00°58E
33893	72 Cet	02 21.1	-12° 44'	"	"	"	42°F	22:34	22:53	B	08°40E
33894	22 Per	02 52.4	+39°16'	"	"	"	"	23:00	23:04	C	05°55E
33895	32 Per	03 14.4	+42°58'	"	"	"	"	23:07	23:14	A	0°-E
33896	HD 21278	03 20.9	+48°43'	"	"	"	"	23:18	23:23	B	0°-E
33897	HD 37579	05 34.1	+31°18'	"	"	"	"	23:30	23:52	C	3°38E
33898	HD 20902	03 17.2	+49°30'	"	"	"	"	00:01	00:03	A	03°11E
33898F1	focus test	out of focus			"	9	40°F			B	
33898F2	focus test			G40	per	~ 22,24,26,28, 30	T=40°F	9 sec			
33899	TA2-1	2h50.2	+55°32'	G40	IIaO	13L	40°F	00:35	01:21	A	01 39W
33900	TA2-2	"	"	"	"	"	"	01:27	02:53	A	03 11W
33901	HD 21565	3h11.5	+49°51	"	"	"	"	02:02	04:06	A	4
33902	NGC 2169-3	6h08.8	+13°58	"	"	13S	"	03:20	04:36	A	

Dome Temp. 38°F H 72%

Focus .....

Dome Temp. 38°F H 90%

Transparency Conditions .....

power back on about 20:30

increasing haze & cloud all night!

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
4h08 W	+36° 50	2"	4.98	B3 IIe	15-15-15	Spec - Bin	40/18		FINE
32 41 W	+29° 25'	1-2"	6.28	A5	15-15-15	"	200/100		FINE
01402W	+36° 40'	"	4.58	A2 IV	15-15-15	"	40/18		FINE
00450E	+33: 45	1"	4.10	A0V	15-15-15	"	40/18		FINE
00440E	-12° 19'	2"	4.45	B9V	15-15-15	"	40/18		FINE
00 58E	+39°35'	"	4.63	A2V	15-15-15	"	40/18		FINE
01h11E	+43° 47	1"	5.03	A3V	15-15-15	"	40/18		FINE
01410E	+49° 01	"	4.84	B3V	15-15-15	"	40/18	V. SL. STR	
02452E	+31°23	"	6.03	A7V	15-15-15	"	200/105		FINE
00 26E	+49°49'	"	2.27	F5Ib	22-22	Std Vel.	20/13		STRONG
					7-7	no filter		U. SC CENTER TO WEST	
01 39W	+55° 52	1-2	9.2	G-K?	3-3-3	Est Class	300/175	setting 28	FINE
03h11W	+55°54	2	8.8	A5V	3-3-3	"	300/125	" Hazy!	FINE
02h43W	+50°07	4	5.1	B3	4	Std Vel	200/25		SL. STR.
1h21W	+13°58	1	9.4	G?	3-	Est Class	900/450	Clouds!	SL. WISP

Date Tues Wed Nov 10-11 1970 Observer R. Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End	D
	telescope	to wet	to observer		H	108%	@ 50°F					
								18:08				

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality

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Date Sun Mon Nov 15/16 Observer GH-Ri Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33903	NGC 1662 (102)	4 47.9	+10° 25'	G40	IIaO	17L	34°F	0:35	02:37	A	01° 12W
33904	" (103)	"	"	"	"	"	"	01:41	03:40	"	33° 15W
33905	" (108)	"	"	"	"	"	32°F	03:48	04:49	"	01° 21W

Dome Temp. 32° H=71%

Focus .....

Dome Temp. 28°

Transparency Conditions ..... cloudy until midnight. clocks wind 3 hrs. out

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01h 12w	+10° 57	3	9.91	G ~~7~~ III	3-3-3	GH-Clusters	800/130	Sect = 26	SL WK
02h 15w	+10° 56	2-3	9.75	A0 V	3-3-3	" "	800/100		FINE
03h 23w	+10° 59	3	9.45	~~B9.5~~ A3	3-3	" "	800/~~100~~ 70	Sect = 25 cloudy at 1	SL. WEAK
9.0 min in MWP-21 @ 62°F =						(2 ADC I.O)			
								21 51	

Date Nov 19/20 Thurs Fri Observer G2 - Ta Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33906	HD14969	02 19.7	+29 26	G12	DaO	13/3	45°F	19:30	20:48	A	02 00 E
33906 F	Focus			〃	〃	13	44°F			B	
									20 Nov 1920		Mwr:

Dome Temp.
Focus
Dome Temp.

Dome Temp. 40°F H=91%

Focus .....

Dome Temp. 40 92%

Transparency Conditions Very hazy
Excellent seeing

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0:48	A	02 00 E	+29° 48'	1"	8.96	K3III	8-7-30	SSV	800/150	too hazy & wet	VERY POOR WEAK
	B		in in / out out.				7/7	no filter			OK
10/1920		mun. 2/ 15 min @ 68°F / 2 30 c E 10									

Date Sun - Mon Nov 22-23 '70 Observer Blu Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33907	HD21447	3h 22m.4	+55°06	G-12	IIa-O	9/.5		02:01	02:21	A	02 5 [illegible]
33908	1 Cam	4 2m.1	+55° 42'	"	"	"	31°F	02:35	03:15	B	03 [illegible]
33908T1	calibration	slit wedge		for plates		33907-	33908		23 Nov 70		Nov 23/70

Dome Temp.
Focus
Dome Temp.

Dome Temp. 62%

Transparency Conditions Scattered clouds

Focus

Dome Temp.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2 21	A	02 42W	+55° 25'	2-3"	5.13	A1V	22-22	Sp B's	40/20	S.b. Time is min for	FINE
3 15 3		02 36W	+53° 55'	3" +	5.40	B0III	15-15	"	40/20	Clouds + Bad seeing	FINE
										Time to quit	
23 hr. 2		Hour Angle 2/	9.0 min	62° F		2 hr. 10					

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality

Date Mon-Tues Nov 23-24/70 Observer Bh-Tm Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33909	28 Cyg	20h 0m.7	+36°33′	G-12	IIa-O	9/15	27°F	18:50	19:04	A	
~~33910~~	~~[illegible]~~	~~21 39.9~~	~~+57 20~~	〃	〃	〃		19:15		B	
33909 1.	calibration	step wedge for # 33909						2 x	two/20		

Dome Temp.
Focus
Dome Temp.

Dome Temp. 24°F H=77%

Focus .....

Dome Temp. .....

Transparency Conditions ..... Scattered cloud

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
:24	A	0 2 ;48W	+36° 52'	3"	4.82	33V c	15-15-15	sp - Bin	40/20		SL. STR.
	t	~~+28 38~~			~~6.90~~	~~A9+A9~~	~~15~~	~~sp - Bin~~	~~200f~~	Clouded out NG	
		Tu-Exp-2/	8.0 min @	65°F		2	90 c	I/O			

Date Tues-Wed Nov 24-25 Observer Enj-Tm Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33910	HD 199139	20 55.2	+44 01	G12	IIaO	131.3	28°F	18:08	19:00	C	02 00W
33911	Fld drawn	(α 1970 03 44.1)			IIaO	9-.5	27°F	00:30	00:44	C	0 56W
33912	HD 22649	0333.5	6254	G12	DaO	"	26°F	00:50	01:24	A	1 40W
33913	HD 48329	06 37.8	+25 14	"	"	"	"	01:32	01:38	C	1 07E
33914	HD 62509	07 39.2	2816	"	"	"	"	01:48	02:02	B	1 45E
33914F	Focus			"	"	9	"			B	
33915	HD 48329	06 37.8	+25 14	"	"	9.5		02:21	02:37	A	0 37E
	~~HD 44033~~	~~06 14.4~~	~~+14 42~~	"	"	"				B	
33915 T1	calibration step wedge for plates 33910 - 33915								25 hrs/20		

Dome Temp. 2
Focus 30 R
Dome Temp. 2

Dome Temp. 23°F H69%
Focus 50 R
Dome Temp. 22°F H80 %

Transparency Conditions Excellent
then cloud by 19^h

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
9:00	C	02 00W	+44 19	2"	9.0	K5p	15-15+5	Late Type	800/180	cloud at 18:45 cutshort	SL. WK
6:44	C	0 56W	+63 16'	"	4.9	=F	15+5+5	unknown	200/150	wrong star-(prec. wrong)	SL. STR
1:29	A	1 40W	+63 08	"	5.0	K3Ip	15+5+5	Late Type	200/200		FINE
1:76	C	1 07E	+25 12	"	3.1	G8Ib	22-22	"	200/150	cloud	FINE
2:02	B	1 45E	+28 08	3"	1.2	K0III	22-22	"	40/33	cloud	(GUIDING) FINE
	B		in/out	out			7/7	no filter			CENTRE TO VIOLET
2:37	A	0 07E	+25 11	2"	3.1	G8Ib	22-22	Late Type	200/140	thru cloud	FINE
	F				5.0	K3Ib		"	20~~0/200~~	Closed 03^h	
		mean 2/9.0 min @ 65°E					/area I:0		-G-	12 rows changed from 50 R & 75 R	

Pg #1
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Date Mon-Tues Nov 30/Dec 1 **Observer** B/h-Th **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33916	26 Peg	23 03.2	+15°42'	6-12	IIa-O	9/.5		19:24	19:26	A	
33917	26 Peg	"	"	"	"	"		19:31	19:33	B	
33918	93 Aqr	23 12.7	-9°44'	"	"	"	42°F	18:44	18:50	C	
33919	33 Aqr	22 01.0	-14°21'	"	"	"	"	18:57	19:07	A	
33920	25 And	00 13.1	+36°14'	"	"	"		19:12	19:16	B	
33921	50 Cass	01 54.9	+71°56'	"	"	"		19:33	19:36	C	
33922	4 Per	01 55.6	+34°00'	"	"	"		19:43	20:03	A	
33923	9 Tri	2h 11m.4	+33°23'	"	"	"	42°F	20:18	20:32	B	
33924	22 Per	2h 52m.4	+39°16'	"	"	"		20:36	20:42	A	
33925	24 Ari	2h 19m.3	+10°09'	"	"	"	41°F	20:49	21:05	C	
33926	HD21447	3h 22m.4	+55°06'	"	"	"	"	21:12	21:23	B	
33927	32 Per	3 14.7	+42°58'	"	"	"		21:30	21:38	A	
33928	5 Tri	2h 05.6	+31°03'	"	"	"		21:44	22:28	B	
33929	16 Per	3h 52.5	+35°30"	"	"	"		22:34	22:36	C	
33930	45 Per	3h 11m.1	+39 43	"	"	"		22:40	22:44	A	
33931	2 Tau	3 21.8	+19 23	"	"	"		22:48	23:10	B	

Dome Temp. 38°F 68%

Focus 75-18 (G12)

Dome Temp. 36 75

Transparency Conditions Clear by 18:30
more cloud 19:20

Ending Time EST	PH	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	A	00 38 W	+6° 06′	1-2″	3.61	A2V	15-15-15	Sp Bin	40/19	Broken in 2 = pieces	SL. STR
[illegible]	B	00 44 W	"	"	"	"	15-15-15	"	40/18		SL. STR
[illegible]	C	00 05 E	−9° 19′	2″	4.24	B5V	15-15-15	"	40/19		V. SL. STR
[illegible]	A	01 22 W	−13° 58′	2″-3″	4.18	[illegible]	15-15-15	"	200/100		SL. STR
[illegible]	B	00 40 E	+36° 34′	2″	[illegible]	A2V	15-15-15	"	40/19		SL. STR
[illegible]	C	02 05 E	+[illegible]° 18′	"	4.08	A1V	22-22	"	40/19		V SL. STR
[illegible]	A	01 36 E	+55 39	1-2″	4.89	[illegible]	30-15	"	200/100	cloud	SL. STR
[illegible]	B	01 25 E	+33° 45′	"	4.10	A0V	15-15-15	"	200/100	"	SL. STR
[illegible]	A	01 54 E	+39° 34′	"	4.63	A3V	15-15-15	"	200/100	"	SL. STR
[illegible]	[illegible]	00 57 E	+10 29	"	5.38	B6	15-15-15	"	200/100		STRONG
[illegible]	[illegible]	01 45 E	+55° 26′	"	5.13	A1V	15-15-15	"	200/101		SL. STR
[illegible]	A	01 21 E	+43° 13′	3″	5.03	A3V	15-15-15	"	200/100		SL. STR.
[illegible]	B	00 39 W	+31° 24′	"	6.25	A[illegible]	15-15-15	"	200/120		SL. STR
[illegible]	C	01 00 E	−35° 44′	"	4.04	07	22-22	"	40/16		SL. STR
[illegible]	[illegible]	00 51 E	+39° 57′	"	2.71	B0.5V	22-22	"	40/19		SL. STR
[illegible]	B	00 04 W	+9° 10′	"	3.66	B8p	15-15-15	"	200/100	cloud	SL. STR

Pg #2
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Date .... **Observer** .... **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33932	HD 29139	04 30.2	+16 18′	G12	IIaO	9.5		23:29	23:33	C	00 40.5
33932F	Focus			〃	〃	9	41°F			B	[illegible]
33932 T1	calibration [illegible] for plates 33916 - 33926								. Dec/70		[illegible]
T2	33927 - 33932										

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ..... cloud .....

Reading Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3333	C	00 40E	+16 30	3"	2.39	KSII	22-22	std vol	40/30	cloud RA clamp	FINE
			im. footed				6/6	no filter			GOOD
Aug/70		WWA-2 / 9.0 min @ 68° F / 230 LIND									
				"							

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Date Wed Dec 2-3 / 70 Observer NL RI DP Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33933	HD 12029 ✓	1 53.0	+28 54	G12	IIaO	13/3		17 32	19:14	A
33934	HD 23675	03 41.9	+52° 21	G12	IIaO	13/3	46°F	19:34	20:04	B
33935	HD 23675	03 41.9	+52° 21	G12	IIaO	13/3	"	20:12	20:36	C
33936	HD 23675	03 41.9	+52° 21	G12	IIaO	13/3		20:43	21:21	A
33937	HD 23675	03 41.9	+52 21	G12	IIaO	13/3	44°F	21:26	21:50	B
33938	HD 23675	03 41.9	+52° 21	G12	IIaO	13/3		21 56	22:26	C
33939	HD 23675	03 41.9	+52° 21	G12	IIaO	13/3	44°F	22:30	22:50	A
33940	HD 23675	03 41.9	+52° 21	G12	IIaO	13/3		23:40	00:08	B
33940 FL	focus test	out of/ in		G12	IIaO	9	41°F			B
33940 11	calibration step wedge for plates 33933 - 33940								30 Dec 70	

Dome Temp.
Focus 75-
Dome Temp.

Dome Temp. 42 F 55%

Focus 75-R

Dome Temp. 37°F 64%

Transparency Conditions .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		2h 14E	29 15'	2-3	8.96	K2III	8-8-8 8-8-8	See Std Vel	800/300		SL. WK
		3h 15E	52° 34'	3	6.52	B0	17-17-17	Dp* G1001	400/120		FINE
		2h 43E	52° 34'		6.52	B0	15-15-15	Dp* G1001	400/120		FINE
		1h 59E	52° 34'	3	6.52	B0	15-15-15	"	400/120		FINE
		1h 28E	52° 34'	3	6.52	B0	15-15-15	"	400/120		(SL. GUIDING) FINE
		0h 53E	52° 34'		6.52	B0	15-15-15	"	400/120		FINE
		0h 29E	52° 34'		6.52	B0	15-15-15	"	400/120		FINE
		0h 50W	52° 34'		6.52	B0	15-15-15	"	400/120	clouds	*
							7-7	no filter			GOOD
										cloud up @ 02:10	
		meridian / 9.0 min @ 64° E/W 270 I:0									
								* BADLY FOGGED WHILE STILL IN PLATEHOLDER			

Date FRI-SAT DEC 4/5 1971 **Observer** G.I. R. / B.A. R. **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
~~33941~~	~~HD 208513~~	~~21h 51.6~~	~~+44° 29'~~	~~G12~~	~~II-a0~~	~~9~~	~~30°F~~	~~17:30~~	~~18:00~~	~~H~~	
33941	HD 209484	21h 58.7	+25° 44'	G12	II-a0	13		18:10	19:36	B	2h 50m W
33942	HD 218428	23h 02.6	+24° 31'	"	"	"	28°F	19:43	21:19	C	4h 50m W
33943	HD 20536	03h 13.1	+61° 38'	"	"	"	27°F	21:27	22:15	A	0h 7E
33943F1	focus test	cut out/lost		"	"	9	26°F			B	
33944	9 Tri	2h 11.4	+33° 23'	"	"	9/5		22:27	23:27	C	1h W
33945	22 Per	02 52.4	+49 16	"	"	"		23:32	23:43	A	1h W
33946	HD 28226	04 22.1	+21 24	"	"	"		23:48	00:28	B	2h W
33947	HD 27691	04 17.1	+14° 57'	"	"	13/9	25°F	00:33	01:10	C	3h W
33948	20 Ori	05 06.3	+14° 14'	"	"	9/5		02:30	03:02	A	0h W

Dome Temp. 61°/0 29°

Focus .....

Dome Temp. 70/0 20°F

Transparency Conditions clear

bad seeing
clouds at 22:10
cleared up at 23:30

clouds at 01:03

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		5"	7.8	B9	17-	Gr Apt ma	400/~~30~~		
24 10W	+30° 05	4	6.99	B9	17-17-17	Gr Apt ma	400/250		FINE
2450W	+29° 55	4	7.23	B9	17-17-17	"	400/250		FINE
0°27E	+61° 55°		6.00	B8	17-17-17	"	200/125	clouds	FINE
					7-7	+ filter		VERY SLIGHT CENTRE TO VIOLET	
1947W	33° 43	4	4.10	A0V	15-15-15	Sp-Bin	200/100	clouds	FINE
1 27W	+39° 35	3	4.63	A2V	15-15-15	"	40/20	cloud up	FINE
00 39W	+21° 35	3	5.99	Am	15-15-15	"	200/110		FINE
1 26W	+1°02'	3	V= 7.09	G0	K-30	"	400/76	cloud at 01:03	WEAK
01 30W	+11°15'	3	4.18	B7V	15-30	"	200/40	Cut short by clouds	FINE

Date Sun Mon Dec 6-7 1970 Observer GH-RJ/RJ Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle East
33948F	~~Sky 16-26 (FI-F6)~~			40	~~IIaO~~		24°F				
33949	Tau 2-3	2h29.2	+55°42	"	"	13L	24°F	17:55	18h55	A	2°55E
33950	Tau 2-4	"	"	"	"	"	23°F	19h04	20:04	"	1°46E
33951	Tau 2-1	"	"	"	"	"	22°F	20:09	21:29	"	0°21E
33952	Tau 2-5	"	"	"	"	"	20°F	21:33	22:49	"	0°57W
33953	HD 20365	3h11.5	+49°51	"	"	"	20°F	23:22	23:26	"	2°4W
33954 ✓	HD 23169	3h37.4	+25°25	G12	"	13/3		23:36	01:36	A	2°5W
33955	HD 23862	03 43.2	+23 56	G12	"	9/1.5	18°F	02:12	02:04	B	1°4W
33956	HD 23[illegible]6	03 43.2	+23 56	G12	"	"		02:40	02:54	C	3°5W
33957	HD 66141	07 57.1	+03 36	G12	"	9/1.5	17°F	03:04	03:34	A	5°0W
33958	HD 65934 ✓	07 56.1	+26 55	G12	IIaO	13/3		03:45	05:28	B	2°1W
33959	HD 90861 ✓	10 04.3	+29°05	G12	IIaO	13/3	16°F	05 33	06:45	C	1°03W
33959F1	focus test	on axis		G12	IIaO	9	15°F			B	
33959T1	calibration strip wedge for plates 33941-33943, 33954-33959										
T2					33944 - 33953						

Dome Temp. 21°F 65%

Focus 75R

Dome Temp. 120F 70%

Brg w Venus bright morning in even up

Transparency Conditions clear with a few clouds at dusk hazy + clouds ~ 01:W from S.W

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	339°F2 – F1 [#5] FOCUS 24 339°F2 – F2 [#6] FOCUS 26					(G42)			
2h55E	+55°52	3	8.7	B9	3-3-3	PH cluster	800/100	set = 22	FINE
1h46E	+55°51	"	8.8	B9	3-3-3	"	800/100	Set = 23	FINE
0h21E	+55°50	2-3	9.2	K?	3-3-3	"	800/200	set = 23	FINE
04h7W	+55°53	3	8.86	B9III	3-3-3		800/100	Set = 22	FINE
0h54W	+51°02	"	8.1	B3	3-3-3	Std Vel	200/25	"	STRONG
2h45W	+25°40	3	9.39	G2V	4-4-4 12	SSV	800/150	hazy + clouds some hazy has moved in	WEAK
3h23W	+24°00		5.01	B8p	15-15-15		400/200	set dark	SC. STR.
3h53W	+24°00		3.54	B8III	15-15-15		200/100	" "	SC STR
0h25W	+02°27	3	5.5	K3	15-15-15	Std Vel.	200/160		FINE
2h11W	+26°45	3	8.87	G8III	4-4-4 4-4-4	Sm. Std Vel	800/200		FINE
1h03W	+28°45	3	8.36	K2III	4-4-4 4-4-4	" " "	800/305		FINE
					7-7 no filter				CENTRE TO WICKET
mop 21	9.0 mm @	68°F/2 foc F10 DAWN				7 & 9/70			

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Date Mon Tues Dec 7-8 1970 Observer GH-RJ Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33960	Tr 2-3	2h 29.2	+55° 42	G-40	IIaO	13μ	18°F	17:37	18:29	A	3h 46m E
33961	Tr 2-1	"	"	"	"	"	"	18:51	19:45	A	2h 26m
33962	Pr 2-2	"	"	"	"	"	17°F	19:56	20:46	A	1h 26m
33963	Tr 2-5	"	"	"	"	"	16°F	20:51	21:45	A	0h 26m
33964	HD 13854	02 09.9	+56 36	G40	IIaO	13μ	16°F	22:03	22:23	A	0h 51m W

Dome Temp. 15°F 65%

Focus

Dome Temp. 13°F 65%

Transparency Conditions clear with scattered clouds clouds at 22:10

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Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
$3^h 20^m$ E	+55° 52	3	8.7	B8	3-3-3	Glt cloudy	800/98	Ref = 22	(GUIDING) * FINE
$2^h 02^m$ E	+55° 52	"	9.2	K2	3-3-3	"	800/		* FINE
$1^h 02^m$ E	+55° 54	"	8.8	A8	3-3-3	"	800/100		* FINE
$0^h 02^m$ E	+55° 55	2	8.8	B9III	3-3-3	"	800/100	Sed = 21	* (GUIDING) FINE
0^m 57W	+56° 58	2	6.2	B1	3-3-3	Stdyd	400/50	clouds	* FINE
mwp 2/9.0 min @ 65° = 1270 c I10 / 8 Aug 1970									
								* COMPARISON PRETTY STRONG	

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Where is my student? E67?

Date Dec 20-21/70 (sun/mon) Observer Th C Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33965	27 Tau	03 43.2	+23 45	G12	IIaO	9/1.5	29°F	23:10	23:14	A	01 06W +2
33966	28 Tau	03 43.2	+23 50	"	"	"	"	23:19	23:31	B	01 23W +2
33967	20 Aur	05 14.7	+41 42	"	"	"	"	23:45	00:01	C	0 21W
33968	112 Tau	05 20.0	+28 31	"	"	"	27°F	00:08	00:10	A	0 25W
33969	HD 32963	05 01.8	+26 12	"	"	13/1.3	25°F	00:23	01:41	B	2 11W +2
33969 F1	Focus Test			"	"	13	"			B	
33969 T1	calibration step wedge				IIaO for plate 33965 - 33969				2.2 units		

Dome Temp. 2
Focus
Dome Temp.

Dome Temp. 25°F H=70%

Focus .....

Dome Temp. .....

Transparency Conditions ..... semi - clear

very good after 0^h
cloud by 01^h

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Reading Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
22:14	A	01 06 W	+24 04	2"-3"	3.54	B8III	22-22	Bp prog[9]*	40/17		
3 31	B	01 23 W	+24 09	2"-5"	5.01	B8p	17-17-17	"	40/19		
01	C	0 21 W	+41 51	2"-3"	4.91	B5V	17-17-17	"	200/90		
10	A	0 25 W	+28 39	2"	1.52	B7III	22-22	"	40/16		
41	B	2 13 W	+26 23	2"-3"	8.36	G2V	8-8-8 8-8-8	S S V	800/250	finder fld drawn (cut short cloud)	fine
	L		min/o-stat				7/7	no filter			
										Closed 03^h	
		Raw wp. 2/ 9.0 min @ 68°F 1200 cc I.O									

1 Dec 71

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Mon-Tues

Hms

Date Dec 21/22 /70 **Observer** McA-Tn/Bln-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
~~33970~~	~~105 Aql~~	~~23 37.3~~	~~-15 06~~	~~G12~~	~~U+O~~	~~9/.5~~		~~17:44~~	~~17:56~~	A	~~0.72E~~
33971	87 Psc	01 08.8	+15 36	"	"	"	20°F	18:03	18:37	B	0.53E
	IR Photometry		19h →	21h 45m							
33972	HD 32963	05 01.8	+26 12	G-12	I+O	13/.3		22 04	00:04	A	0.4W
33973	45 Per	03 51.1	+34° 43'		"	9/.5	12°F	00:12	00:16	B	2.0W
33974	46 Per	03 53.5	+35° 20'			"	"	00:21	00:31	C	2.1W
33975	71 Tau	04 24.7	+15° 33'			"		00:37	00:50	A	2.0W
33976	HD 37226	05 26.3	+21° 29'		"	"		00:54	01:27	B	2.1W
33971 F1	Focus			"	"	9	20°F			B	

Dome Temp.
Focus
Dome Temp.

Dome Temp. 17°F H=59%

Focus .....

Dome Temp. .....

Transparency Conditions good Cloud by 23:30

922 - 4316

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Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
5 56	A	~~0 02E~~	~~-14 38'~~	~~3-4'~~	~~4.44~~	~~B5I~~	~~17-17-17~~	~~hefac~~	~~40/18~~	~~Limit broken~~	~~Good~~
9 37	A	0 53E	+16 03	"	5.91	88p	17-17-17	mag str. proj	400/200		FENE
								spect ampl. central bal; veiling minus strong L.L.			
0 04	A	0 41W	+26 22	3-4'	8.36	GZI	~~8-8-8~~ 8-8-8	SSV	800/285	cloud	FINE
0 44	B	2 04W	+39 57	"	2.71	B0.5II	17-17-17	Sp - Bin	40/18		STRONG
1 31	C	2 13W	+35 46	"	4.04	G7	17-17-17	"	200/85		STRONG
2 00	A	2 05W	+15 37	3"	4.73	F0II	17-17-17	"	40/25		
11 37	A	2 48W	+21 37	"	5.99	Am	17-34	"	200/85		VERY WEAK
	B									33971 FI -	SC. CENTRAL TO VIGNET

- PLATE # 33971 WAS IN 1 EXP. BOX IN THE REFRIGERATOR
- A SECOND EXPOSED BOX WAS IN THE FRIG, EMPTY
- THE BALANCE OF THE EXPOSED PLATES WERE MIXED IN WITH THE UNEXPOSED PLATES (IN THE DOME)
- (# 33971 & # 33976), AND (# 33975 & 33971 FI) ARE DOUBLE EXPOSURES
- NO TRACE OF # 33970

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Date Mon Tues 28-29 **Observer** GL RI **Julian Day**

Dome Temp.
Focus 75
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33977	HD51418	$5^h 52.^m 2$	+47° 26'	G12	IIaO	9L	19°F	01:02	02:24	A	
33978	HD56222	$7^h 11.^m$	+31° 53'	"	"	13L	17°F	02:33	03:25	B	
33979	HD32010	$4^h 24.^m 3$	+31° 45'	"	"	9L	17°F	03:35	06:04	C	
33980	HD135674	$15^h 11.^m 3$	+26° 31'	"	"	13L	14°F	06:13	07:02	A	
33980F1	four tubes	and and/in		G12	IIaO	9	13°F			B	
33980 T1	calibration	strip wedge			IIaO	for plates		33977-33980			

Dome Temp. 15°F 75%
Focus 75-R
Dome Temp. 100F 75%

Transparency Conditions good after 0110 clock I wish someone would check the clocks in the dome

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	2	01h40W	+42° 23'	3"	6.61	A0	17-17-17	G1 Ap+m	200/125		SL. STR
	1	02h23mN	+31° 49	3"	6.63	B8	17-17-17	"	200/125		SL. STRONG
	1	02h49mW	+21° 30'	3"	7.55	B8	17-17-17	"	400/250		FINE
	0	02h00E	+25° 48'		6.67	A0	17-17-17	"	200/125		STRONG
	6						7-7 mo foto				CENTRE TO VIOLET
	1	2 Sec / 70	mean 2/	9.0 min	@ 62.0°F		270 c I.O				
										changed focus from 75-R to 95-R (Line 29)	

Date Tues Wed Dec 29-30 **Observer** JH-RI **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
33981	HD 22649	3 33.5	+62°54	G12	IIaO	9L	17°F	18:07	19:13	A	
33982	HD 44033	6 14.4	+14 42	G12	IIaO	9L		19:35	21:23	B	
33982F1	focus test	on edge		G12	IIaO	9	15°F	0		B	
					plenty						
33983	HD 77247	8 56.3	+53 30	G12	IIaO	13/5	12°F	01:19	02:44	C	
33984	HD [illegible]	12 11.1	[illegible]	G12	IIaO	9/5	10°F	03:00	04:31	A	
33985	HD 101.3	11 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9°F	04:42	06:20	B	
33986	HD [illegible]	[illegible]	[illegible]				7°F	36:25	07:00	C	

Dome Temp.
Focus
Dome Temp.

Dome Temp. 140°F 75%

Focus 95-R

Dome Temp. 5°F 72%

Transparency Conditions start at 20:30
clear up at 21:10

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1:13	F	2h42E	+63° 11'	2	5.0	K3Ib	15-15-15	Waterlow	2m/3m		(AVIDING) FINE
21:23	15	2h40E	+14° 45'	2.3	5.0	K3Ib	15-15-15		2m/2m		FINE
	3						7-7	Refocus			CENTRE OF DISC
	6	0h	53 15	2	8.1	K0p	15-15-15	Waterlow	8m/10m		FINE
	8	1:26E	+49 52	2	7.4	M0III	15-15-15	"	4m/4m		FINE
	10	1h W	+50 48'	3	[illegible]	K1p	15-15-15	"	2m/2m		FINE
		1h37W	+34° 25'	"	5.3	G8V	15-15-15		1m30s/1m		SL STRONG

Date WED./THUR. DEC. 30/31/1970 **Observer** Hd-Gz-Tm/McL-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33987	HD 14969	02 19.7	+29 26	G12	IIaO	13/0.3	13°F	17:51	18:28	A
33988	HD 23169	03 37.9	+25 25	"	"	13/0.3	"	18:43	20:54	B
	IR Photometry		21h →	23:30 Hrs						
33989	HD 36526	05 27.2	-01° 40'	G12	IIaO	13/.5		00:00	01:16	A&B
33991	AG 4044	07 28.2	+28 57	"	"	13/.3	11°F	01:28	03:02	C
33990	HD 72208	08 26.5	+10 09	"	"	9/.5	"	03:19	03 56	A
33992	HD 82191	09 25.4	+27 50	"	"	"	"	04 06	04 40	B
33993	HD 107494	11 42.7	+27 53	"	"	13/.3		04 47	06 19	C
33994	HD 112413	12 51.4	+33 52	"	"	9/.5	"	05 34	0637	A
33995	HD125162	14 12.6	+46 32	"	"	9/.5	10°F	06 46	06 52	B
33996	HD124897	14 11.1	+19 42	"	"	"	10°F	07:04	—	A
33996 F1	Focus			"	"	9				B
33996 T1	calibration			for later		33981 - 33989, 33991				
T2				33990, 33992 - 33996						

Dome Temp. 13°F H=74%

Focus 95-2

Dome Temp. 8°F H=73%

Transparency Conditions Excellent

RA Clamp trouble — blows fuses

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		01 37 E	+29 48	2"	8.96	K3III	6-6 8-8-8-8	SEC. STD. VEL.	800/250		FINE
		01 00 E	+25 42	"	9.39	G2V	8-6-8 8-6-7	"	800/250		FINE
		2 04W	-01 34	1-2"	8.2	B8IIIp	14-14-14	Bp prog - RG	800/300	fld drown (Correct ston. Told checked by CA)	FINE
		1 48W	+23 51	"	9.29	G0IV	7-7-7- 7-7-7	Sec STD vel	800/250		FINE
		1 46W	+09 59	2"	6.58	A0	14-14-14	Sp Bin	200/80	fld drown	FINE
		1 30W	+27 33	"	6.59	A0	14-14-14	"	200/80		FINE
		0 53W	+27 33	1-2"	8.26	G8IV	7-7-7 7-7-7	S S V	800/250	cloud	FINE
		0 02W	+38 30	2"	2.9	A0p	14-14	mag star	40/15		SL. TR. FINE
		01 03E	+46 15	"	4.26	A0	21-21	"	40/18		FINE
		0 50E	——	"	1.29	K2III	21-21	std vel	40/20		(Cloudy) FINE
			in in / out out				6/6	no filter			SL. CLOUDS NO WIRES
		3 18 ee	1970	m wp. 2	/ 9.0	min @	68°F		240c	IO	
								RA Clamp fixed — Hv			

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Date New Years Day / Jan 2 Observer DT - Tn - Gz / Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
33997	HD 14769	02 19.7	+29 26	G12	IIa-O	13/0.3	20°F	18:10	18:14	A
33998	HD 23169	03 37.9	+25 25	"	"	"	"	18:51	20:08	B
33999	HD 18473N	02 53.1	+59 17	"	"	13/0.5	"	20:18	20:48	C
34000	HD 23324	03 39.2	+24 32	"	"	9/0.5	"	20:54	21:04	A
34001	HD 23383	03 39.7	+55 37	"	"	9/0.5	"	21:10	21:30	B
34002	HD 25838	03 43.1	+44 40	"	"	9/0.5	"	21:35	21:55	C
34003	HD 27742	04 17.7	+20 45	"	"	9/0.5	"	22:00	22:18	A
34004	HD 29365	04 32.4	+20 29	"	"	9/0.5	"	23:30	23:54	A
34005	HD 51418	06 52.2	+42 26	"	"	9/0.5	15°F	00:04	00:21	C
34005 F	Focus			"	"	9	18°F			R
34005 T1	calibration step wedge for plates 33997 - 34005								4 jan	

Dome Temp.
Focus
Dome Temp.

Hour Angle
East

Dome Temp. 18°F H= 65% Transparency Conditions Excellent (AMAZING SEEING)

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0 14 E	+29 49	~1"	8.96	K3III	7-7-7 7-7-7	SEC. STD. VIS	900/270		FINE
21 08 E	+25 42	"	9.39	G2V	7-7-7 7-7-7	"	800/250		FINE
00 15 W	+59 35	"	7.35	A0	14-14-14	Sp Bin	400/200		(GUIDING) SL. STRONG
0 11 E	+24 48	"	5.64	B8V	14-14-14	SPEC. BIN.	200/100		STRONG
00 11 W	+55 58	"	6.00	B9	14-14-14	"	200/100	CLOUDS	STRONG
00 34 W	+44 56	1-2"	5.79	G5	14-14-14	"	200/100		FINE
0 23 W	+20 58	"	5.9	B9V	14-14-14	"	200/100		STRONG
21 45 W	+20 42	2"	5.70	B8V	14-14-14	"	200/100	CLOUDS	(GUIDING) SL. STRONG
0 08 E	+42 24	2-3"	6.61	A0p	14-30	Peg star	400/54	cloud (cut short)	WEAK
					6/6	no filter		closed 0.30	GOOD

mWP-2/ 9.0 min @ 68°F / 20°C I:10

Waterloo Night

Date Jan 5-6 Tues-Wed 1971 **Observer** JH-Emj-Th **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34006	HD 20023	03 08.0	+46 45	G12	IIaO	13/.3		17:47	19:19	A	1 12E
34008	BD:+47781	3h 06m.4	47° 43′	G12	IIaO	13/.3	25°F	19:49	21:49	C	1 20W
34007	Moon -	near Plato		〃	〃	9/.5	〃	21:59	2200	A	2 2W
34009	HD 31487	04. 51.3	+51 47	〃	〃	13/.3		2217	00:35	B	2 21W
34010	HD 44537	06 17.2	+49 20	〃	〃	9/.5	22°F	00:46	01:22	C	1 43W
~~34011~~	~~HD 44033~~	~~06 14.4~~	~~+14 42~~	〃	〃	4.		~~01:31~~	01:47	A	
~~34011~~	~~HD62509~~									C	
34010F	Focus			G12	IIaO	9				C	
34011	HD 76294	08 50.1	+6° 20′	〃	〃	9/.5	21°F	04 16	04 24	A	2 14W
34012	HD62509	07 39.2	28 16	〃	〃	9/.5	〃	04 34	04 38	C	3 5W
34012 T1	calibration		for plate	34006 -		34012			6 Jan		

Dome Temp. 2
Focus
Dome Temp. 1

Dome Temp. 25°F 84%

Focus

Dome Temp. 18°F 76%

Transparency Conditions Excellent (bad seeing)
Windy

200

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Occidental Program	Exp. Mtr.	REMARKS	Quality
1 12E	+47 04	3-4	8.6	A0	14-14-14	?	200/300	wrong filter A0 3:13	
1 20W	+48 02	3-4	8.5	G5	14-14-14	Fld	800/360		
2 24W					50	Moon	20/8		
2 21W	+51 58	2"	9.0	K0p	14-14-14	Late Type	800/300		
1 43W	+49 21	"	5.1	K5Ib	14-14-14	"	200/160		
	~~+14 43~~	~~3"-4"~~	~~5.0~~	~~K3Ib~~	~~14~~	~~"~~	~~200/150~~	windy (cancelled)	
								cloudy	
					7/7	no filter			
2 14W	+6° 08'	2-3"	3.1	K0III	14-14-14	Late Type	40/22		
3 40W	28° 09'	4"	1.2	K0III	22-23	"	40/20	cloud, snow	
NWP-2	19.0 min @ 62°F			12 Toc I.0					

Date Jan 6-7 Wed Thurs 1971 Observer Hd-Tm Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34013	HD 14969	2 19.7	29 26	G12	IIa-O	13-3	20°F	17 43 (1:20)	19 03	A	6 3E
34014	HD 23169	03 37.9	+25 25	"	"	"		19 08	~20 30	B	
34015	HD 82191	09 25.4	+27 50	G12	IIa-O	9/0.5	17°F	03 25	4 11	B	
34016	HD 91943	10 31.9	+60 38	"	"	13/0.5	"	04 18	05 06	A	
34017	HD 81995	09 24.1	+45 12	"	"	13/0.5	15°F	05 15	06 11	C	
34018	HD 120714	13 47.1	+59 02	"	"	9/0.5	"	06 19	06 55	B	

Dome Temp. 18
Focus
Dome Temp. 14

Dome Temp. 18°F 70%

Focus .....

Dome Temp. 16F? 76%

Transparency Conditions Excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0 35E	29 48	1-3"	8.96	K5 II	8-7-7 8-7-7	SSU	800/300	at 3h12m +29° 15 groups	
0 30E	+25 43	2"	9.39	G2V	7,7-8 24	"	800/100	most only a few degrees runway. By exp mtrs Q+*=5 x During Ci cloudy period. Q÷* Capt from Ct 100 Snow — cloud 20 25	
								(Area - could be - accordingly ...)	
01 30W	+27 36	4-5"	6.59	A0	14-14-14	SPEC. BIN.	200/80	SEEING POOR, WIND!	
01 18W	+60 20	2½-3"	7.57	F8	14-14½	"	800/400	" "	
03 30W	+44 57	"	7.12	A5	14-14-14	"	800/320	" "	
00 06E	+58 42	3-4"	6.36	A0	14-14-14	"	400/180	" "	

Date Jan 7:8 Thurs Fri 1971 Observer In Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
~~34019~~	~~HD 3881~~	~~00 36.3~~	~~+59 23~~	~~61Z~~	~~E-0~~	~~136.5~~		~~17 · 47~~		~~A~~

Done Temp. 1
Focus
Done Temp. 1

Hour Angle End

Dome Temp. 15°F 70%

Focus .....

Dome Temp. 10°F 66%

Transparency Conditions Excellent (for about 10 min) then cloud

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
				~~1½"~~	~~7.35~~	~~AC~~	~~15~~	~~Sp Bin~~	~~400/160~~	cloud (scrapped)	
										closed 03h	
										after much procrastination	

Date ..... Observer ..... Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
3401 9	SGC HD 84943	06 50.2	+20° 43.0	G12	IIaO	9/.5	20°F	19:23	19:55	B	4 10E
3401 0	AW Per = HD 237287	04 41.1	+34° 53.6	G12	IIaO	13/.3	20°F	20:07	21:27	C	0 20E
3401 1	T Tau HD 284496	04 19.0	+19 09.4	G12	IIaO	9/.5				A	
3401 2	4 Cam = HD 29140	3 45.1	+34° 13	G12	IIaO	9/.5	18°F	21:49	22:11	A	1 5W
3401 2 T 1									12 Jan 71		2 0W

Dome Temp. 17
Focus .....
Dome Temp. 14

Dome Temp. 17°F 86%

Focus .....

Dome Temp. 16°F 90%

Transparency Conditions Scattered cloud
Full moon

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
9 55	C	4 10E	+20° 10′	2"-4"	A-44	F76-	15-15-15	Epsilon Theta	200/120		FINE
1 27	C	0 20E	+36° 42	1"-3"	1-71	F6- G1	15-15-15	Epsilon Theta	300/166	perhaps some Dspec cw short	VERY WEAK
						F75		Epsilon			
2 11	A	1 15 W	+39 59	2"	2-71	B0-5I	15-15-15	Epsilon	200/120	cloud	FINE
		Hcwp 2/ 6-0 min @ 66°F/ 2 20 = 110									

Property of Lowell Observatory
Please return to Lowell Observatory
1400 W. Mars Hill Road
Flagstaff, AZ 86001

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Date Jan 11/12 Observer DH Jr Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
								02:49	57	C	

Dome Temp.
Focus
Dome Temp.

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ..... scattered cloud

cloud gave up
snow on dome, windy

...ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	C						15-		800/	cloud	

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Hms - R^2 - IR Phot

Date Jan 12-13 Tues-Wed 1971 **Observer** Tn / Tn - Dimraths **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
IK Photometry - 1st half											
	Scrapped again - too much cloud - ⊙ spect							00:21			
34022	HD 93702	10 44.0	+11 04	G12	IIaO	9/5	8°F	01:42	02:36	B	01 30E +1
34023	HD 58715	07 21.7	+8° 29	"	"	"	7°F	02:50	02:56	A	2 40W +1
34024	HD110411	12 36.8	+10 47	"	"	"	"	03:11	03:37	C	1 52E +1
34 [illegible]	HD [illegible]	11 45.5	+2° 20	"	"	"	"	03:50	04:14	A	0 24E 1
34025F1	Focus			"	"	9	7°F		04:[illegible]	B	

Dome Temp. [illegible]
Focus
Dome Temp. 5

Dome Temp. 10°F H=66?0

Focus .....

Dome Temp. 6°F? H=64?0

Transparency Conditions ..... some cloud .....

Reading Time EST	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
			+25°06'	2"-3"			7-7	S S V	800/	cloud [some ? spec moon 4% away	
2:36	B	01 00E	+10 44	2"-3"	5.29	A2V	15-15-15	Sp Bin	400/150	cloud	SL OF FINE
2:56	A	2 40W	+8 25	"	2.74	B7V	15-15-15	"	200/80	" [illegible]	FINE
3:37	C	1 52E	+10 27	"	4.97	A1V	15-15-15	"	200/80	cloud	FINE
4:14	A	0 24E	+1 59	4"	4.16	F8V	15-15-15	std vel	200/85	cloud [illegible]	FINE
5:11	B		[illegible]				7-7	[illegible]			COLD
		dew "jam" 71	Mwr. 2/	9.0	min	for	68°F	(20°C I0)			

Date Fri Sat Jan 15-16 1971 **Observer** G-I-R; / Mill-R; **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34026	HD 21933	03h 2m1	09° 02'	G12	IIaO	9/.5	22°F	18h 41	19: 18	A	0h50
34027	HD 26571	04 07.0	22 09	G12	IIaO	9/.5	20°F	19: 27	21: 12	B	0h14
34027 FL	frosted	started/		G12	IIaO	9	16°F			B	
34028	HD51418	06h 32m2	+42° 26'	"	"	9/.5	15°F	22:18	23.44	C	1h17
34029	HD 38104	05 38.09	+49 47	G12	IIaO	9/.5	12°F	00:00	00.38	A	1h17
34030	HD51418	06 52.2	+42 26	"	"	9/.5	10°F	00.42	01 4[illegible]	B	1h24
34031	HD 39502	10 16m56	+ 66° 04	"	"	9/.5	9°F	01.55	02.12	C	1h42
34032	HD 90569	10 22m22	+ 10° 06	"	"	9/.5	8	02: 20	03 03	A	1h57
34033	HD 102494	11 42.7	+27° 53	"	"	13/.3	5°F	03 17	05 03	B	2h10
34034	χ^2 CVn (HD 112413)	12 51.4	+38° 52	"	"	9/.5	4°F	05:15	05:19	C	2h41
34035	HD 53858	11 57.0	+15° 05	"	"	9/.5	4°F	05 33	06 58	A	2h57

Dome Temp.
Focus
Dome Temp.

Dome Temp. 18°F 70%

Focus

Dome Temp. 020F? 69%

Transparency Conditions few snow flurries at begin of night

Reading Time EST	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		04 50 E	+09° 20'	3	5.59	B8	17-17-17	G1 Ap+m	200/100		FINE
		04 23 W	+220 24	3	6.11	B8	17-17-17	G1 Ap+m	200/150	clouds	(GUIDING) SL. UNR CENTRE TO VIOLET
							7-7 no fill				
		0h 10m W	+42° 24'	3	6.61	A0	17-17-17	G1 Ap+m	400/200		FINE
		02h 17m W	+490 53	3	5.47	A0p	15-15-15	MAGNETIC STAR	200/100		STRONG
		02h 12m W	+42°24	3	6.61	A0	15-17-17	MAGNETIC STAR	400/200		FINE
		23h 48m E	+65° 45	3	4.95	A0p	17-17-17	magnetic star	200/100		SL. STR
		00h 03m	+09° 57	3	6.03	A0p	17-17-17	magnetic star	200/100		SL. STR
		00h 39m W	+270 33	3	8.26	G8 III	7-7-7 7-7-7	S. S. V.	800/300		FINE
		00h 13m E	+38° 29		2.9	A0p	17-34	magnetic star	20/10		STRONG
		02h 39m E	+14° 58	4-5	6.2	A4p	17-17-17	magnetic star	400/200	seeing degenerated during exp.	SL. STR BROKEN (DURING PROCESSING)

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Date Sol Sun Jan 16-17 1971 **Observer** Rm R: / G1-R: **Julian Day** ~ 2440 24.9

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34036	HD 30282	04 41m 05s	+36° 32.6	G12	IIaO	13/.3	8°F	18:03	19.26	A	
34037	HD 31913	04h 54m 28s	+39° 48.7'	G12	IIaO	13/.3	8°F	19:37	20.58	B	
34038	Comet	05 58.5	+35° 20	G12	IIaO	13/.3	8°F	21:07	22 30	C	
34039	W Gem	06h 33m 17s	+15° 21.5°	G12	IIaO	13/.3	7°F	22.38	23:20	A	
34040	AT Mon	06h 28m 08s	+30 33.3	G10	IIaO	9/.5	7°F	23 28	00 02	B	
34041	HD 45407	06h 13m 2	+13° 35'	G12.	IIaO	9/.5		00:10	01:48	C	
34042	HD 55283	07h 07m 2	+15°21	G12	IIaO	9/.5	5°F	01:56	04:06	A	
34043	BD -10° 3452	12h 16m 0	-10°55'	G12	IIaO	13/.3		04:40	06:22	B	
34043E	focus test on 34043			G12	IIaO	9	4°F			B	

Dome Temp.
Focus
Dome Temp.

Dome Temp. 10°F 76%

Focus

Dome Temp. 02°F 76%

Transparency Conditions Excellent until 02:30

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1h53E	+36° 44	2	7.9-8.8	F6-G1	7-7-7 7-7-7	Evans Thesis	800/300		FINE
0435E	+39° 58	3	8.0-9.0	F8-G8	7-7-7 7-7-7	Evans Thesis	800/300		FINE
0h02E	+35° 23	2-3	7.8-8.6	F5	7-7-7 7-7-7	D_y *	800/300		FINE
04h11W	+15° 25	3	7.9-8.9	F6-G5	7-7-7 7-7-7	Evans Thesis	800/300		FINE
01h02W	+30° 34	2	5.3-6.5	F+G0	15-15-15	Evans Thesis	200/180		FINE
03h58mW	+13° 37'	2	7.5	A0	17+7-17	G1 Apgin	400/200		FINE
04h22mW	+15° 17	2	7.39	A0	17-17-17	"	400/200	clouds at 02:30	FINE
01h30mW	-11° 16'	3	7.3	A0	17-17-17	"	200/175		WEAK
					7-7 w filter				CONSEC TO VIOLET

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Date Sun Mon Jan 17-18 1971 Observer P. Dinerstein R/ Has-Rv Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34044	HD 30282	04h 41m 05s 1970	+36° 30' 6 1970	G12	IIaO	13/.3	120°F	18:03	19:08	A	00:05 E
34045	α Cas	0438.8	+56° 22	G12	IIaO	9/.5	12"	19:27	19:40	B	0:02 W
34045F1	focus test and add/ir			G12	IIaO	9	120°F			B	
	IR photometry							23:00	22:30		
34045 T1	step wedge for later	34026 - 34035							18 Jan 71		11:45 W
T2		34036 - 34045									

Dome Temp.
Focus
Dome Temp.

Dome Temp. 120°F 73%

Transparency Conditions .....

Focus .....

Dome Temp. 090°F 70%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02408E	+36° 44	2	7.9-8.8	F6-G1	7-7-7 7-7-7	Evans 9 stars	8m/32m		FINE
02431W	+56° 07	2	216	KO	07-27	G100 Dinraths*	20/12	1 dropped clouds	STRONG
					7-7	filter		snow	GOOD
	NWP-2 / 9.0 min @ 60°F / 2RO & I10								

Ending Time E.S.T. P.H.

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Date Mon Tues 18-19 1920 Observer Hnz-Ri Julian Day

Done Temp.
Focus
Done Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
	IR Photometry							18:15	21:30		

Dome Temp. 020F 66%

Focus .....

Dome Temp. -040F 68%

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
								Sanborn	

219

Date Jan 19-20 1971 Observer Ri-JM(Wat) Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34046	HD 86801	09 55 9	+29° 02	G12	IIaO	13/.3	08°F	02:45	05:15	A
34046 F1	focus test	on 2 of 7 min		G12	IIaO	9	08°F			B
+1						9/.5				B
T2										C

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. 06°F 74%

Focus .....

Dome Temp. 05°F 75%

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2454W	+28°46	2	9.48	GOU	7.7, 7 7-7.7	Sa. Sta Rul.	800/280	clouded over	FINE
					7-7	no filter			Good
	full aperture				12 S		re exposure test		
					20 S				

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Date THUR-FRID JAN 21-22 1971 Observer Tm-Gz Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
	MIRROR COVERED BY FROST									

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. 20°F H-920

Transparency Conditions SOME CLEAR PERIODS

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality

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Date Jan 23-24 Sat-Sun Observer Tn Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34047	HD 30282	04 41.1	+36 33	G12	IIIa0	13/3	26°F	18:04	19:50	A	01 03E
34048	RT Aur	06 22.1	+30 33	"	"	9/5	25°F	19:56	20:30	B	02 02E
	IR	Phot	0h →	5h:30							
34049	HD 130841	14 45.4	-15 38	G12	IIIa0	9/5		05 50	05 58		04 51E
34050	HD 130109	14 41.2	+2 19	"	"	"		06 03	06 43		04 05E
→											

Dome Temp. 22°F H=76%

Focus .....

Dome Temp. .....

Transparency Conditions Excellent

VERY windy

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
9 50	F	01 03E	+36 42	1"2	=8	F6-G1	6-6-6	Evans Tues cepheid	800/300	cloud at 19.30	FINE
3 30	G	02 02E	+30 32	2"	=6	F1-G0	6-6-6	"	400/140	thick cloud cut down	GUIDING FINE
5 52		00 57E		4"	3.89	A_m	9-9	Sp Bn	200/80	cloud	FINE
6 43		00 06E		2"	3.74	A0V	9-9	"	200/100	thick cloud	FINE

Has IR Plot pinraths

Date Jan 24-25 Sun-Mon **Observer** Tn Jn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34051	HD 11291	01 45.8	+50 18	G12	IIaO	9/5	29°F	18:06	18:22	A
34052	HD 10260	01 35.3	+60 32	"	"	"	"	18:29	19:07	C
34052F	Focus			"	"	9	"			B
	IR Phot	19 -> 22h								
34053	HD 82191	09 25.4	+27 50	G12	IIaO	9/5	28°F	02:05	02:59	A
								25 Jan 1971		

Dome Temp. 25°F H=80%

Focus ..... Humidity rising ??(seems dry)

Dome Temp. 25°F H=100%

Transparency Conditions ..... scattered cloud

cloud by 22h

Reading Time EST	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
8:12	A	00 29W	+50°43′	2"	5.62	B9III	6-6-6	Spectbin	200/100		Sc. STR
9:07	C	01 23W	+60 56	1"-2"	5.58	B7V	6-6-6	"	200/100	seems faint but [illegible]	Sc. STR
	B		in in/out out				3/3	no filter			GOOD
11:19	A	01 28W	+27°35′	1"	6.59	A0	6-6-6	Spectbin	200/100	some cloud	(variable) FINE
										Closed 03h	
										some frost in mirror	
		flat. 34047-34053		in twilight		2 (∞	61°F	go.	9 minutes; no correction, late		

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Date Jan 27-28 wed Thurs Observer H-Ja Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34054	HD 23169	03 37.9	+25 25	G12	D00	13/3		18:15	19:05	

Dome Temp. 16
Focus
Dome Temp.

Hour Angle End	

Dome Temp. +01°F A=66%

Transparency Conditions scattered cloud
very windy

Focus

Dome Temp.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1[illegible]		00 30E	+25 42	3"-4"	8.36	G2V	3-3-12	5.5V	[illegible]/35	cloud – cut short	ALMOST BLANK

Date Jan 28-29 Thurs-Fri, 1971 Observer Dy-Tn/Tn-Gz Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34055	M Mon			G12	IIaO	13/1.3		23:10	23:58	B	
34056	HD 50773	06 58.2	+20 43	"	"	9/0.5	12°F	00:06	00:16	C	
34057	HD 72208	08 26.5	+10 09	"	"	9/0.5	"	00:25	01:33	B	
34058	HD 82171	09 25.4	+27 50	"	"	9/0.5	11°F	01:39	02:13	C	
34059	HD 91948	10 31.9	+60 38	"	"	13/0.5	"	02:23	02:59	A	
34060	HD 84411	09 40.2	+24 19	"	"	9/0.5	"	03:10	03:20	B	
34061	HD 81975	09 24.1	+45 12	"	"	13/0.5	10°F	03:30	04:02	C	
34062	HD 120814	13 47.1	+59 02	"	"	9/0.5	"	04:11	04:34	A	
34063	HD 91948	10 31.9	+60 38	"	"	13/0.5	"	04:44	05:26	B	
34064	HD 152224	16 47.0	+32 44	"	"	9/0.5	"	05:35	06:31	A	
34065	HD 130841	14 45.4	-15 38	"	"	9/0.5	"	06:39	06:43	C	
34065A	Focus			"	"	9				B	

Dome Temp. 10°F 80%

Focus

Dome Temp. 7°F 80%

Transparency Conditions ... good ... STRONG WIND

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 41W	−9 39	3"	≈6.5	~G	6-6-6	RV Tauri	400/180		FINE
01 28W	+20 41	2"	4.4-5.2	F1-G2	6-6-6	CEPHEID Pg.	300/100		FINE
01:17W	+10 00	"	6.58	HD	6-6-6	SPEC. BIN.	200/80	cloud	(CHANGING) FINE
00:58W	+27 35	"	6.59	A0	6-6-6	"	200/80		(CHANGING) FINE
00:37W	+60 20	"	7.37	F8	6-6-6	"	200/110	more cloud	FINE
01:49W	+23 56	"	3.76	GOII	9-9	swivel	200/90	cloud	FINE
02:47W	+44 57	"	7.12	A5	6-6-6	SPEC. BIN.	400/160	WIND NOT AS STRONG	(CHANGING) FINE
01:00E	+58 43	"	6.36	A0	6-6-6	"	800/80		FINE
02:05W	+10 19	"	7.37	F3	6-6-6	"	800/110		(CHANGING) FINE
02:03E	+32 40	2-3"	6.26	KOIII	6-6-6	"	200/130		FINE
00:09W	−15 50	3-4"	2.51	Am	9-9	"	40/15	Brightest star in field broken	FINE (GOOD)

231

Date Jan 30-31 Sat-Sun Observer Rm-Tr / In-Gl Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34066	5 Gem = HD 72973	06h 58.2	+20° 43.0	G12	IIaO	9 | 5	12°F	23:26	23:42	A	01 00W
34067	RT Aur	06h 32.1	+30° 33.3	G12	IIaO	9 | 5		23:52	00:52	B	01 47W
34068	53 Leo (HD 93702)	10h 44m.0	+11° 04'	G12	IIaO	9 | 5	9°F	01:00	01:20	C	0 m 1
34068F1	FOCUS					9	9°F			B	
		TR-	Phot		02h ⇒ 6h30			Excellent			
34068 T1	calibration strip wedge for plate				34054-64						1.6 17
T2											

Dome Temp. 7°F 70%

Focus .....

Dome Temp. -5°F 70%

Transparency Conditions ..... Sc. Heted cloud

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 00W	+20 42	turbid	4.44 - 5.30	F7 V 030	6-6-6	Cepheid - Equis	200/100		FINE
0297W	+30 36	"	5.3 - 6.5	F1 - G0	6-6-6	Coplxd Equis	200/110		FINE
01h00E	+10°47'	"	5.29	A2V	6-6-6	Sp-Bin	200/20		(GUIDING) FINE
	within coudoff				3-3	no filter			CENTRE TO VIOLET
1 Feb 71	mw 0-2 for 9.0 min @ 68°F			"		290c 1K0			

Ending Time E.S.T. P.H.

233

Exp'n 11 reseat 04° -7°

Date Jan 31 - Feb 1 Sun-Mon Observer Pitt-Turf Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34069	HD 41335	05 57.9	-6° 42'	G12	IIIaO	9/5		19:30	19:42	A	5 50E
34070	"	"	"	"	"	"	04°C	20:30	20:46	B	6 46E
34071	CO Aur	05		"	"	13/3		21:36	22:24	C	00 58W
									?		

Dome Temp. 75°F F5/6

Focus .....

Dome Temp. .....

Transparency Conditions ..... Scattered cloud - poor
Strange bright object producing cloud
8" = -0°12 ± +23

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 50 E	-6 37	2-3"	5 7 V	P2 IV	6-6-6	Glow PH	200/80		FINE
00 46 E	"	3"	"	"	6-6-6	"	200/80		(WAVING) FINE
00 ~~50~~ 57 W		2"	7 8 E 6	F5	6-12	N Tau	800/80	Cloud	? DADLY OUT OF FOCUS

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1971 Waterloo Obs

Date Feb 2-3 Tues-Wed **Observer** JH-Tq **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34072	HD 22649	03 33.5	+62 54	G12	IIaO	9'.5	+07°	18:24	18:54	A
34073	+47 781	03 08.9	47 43	"	"	13'.3		19:02	20:44	B
[illegible]	HD 44337	06 17.2	49 20	"	"	9'.5	+5°	20:57	21:57	C
JF075	HD 98329	06 37.8	25 14	"	"	"		22:10	22:22	A
34076	HD 62509	07 37.2	22 16	"	"	"		22:31	22:33	B
34077	HD 44033	06 14.9	+4 42	"	"	1'		22:47	00:07	A
34078	HD 44537	06 17.2	49 20	"	"	"		00:15	00:48	B
34079	HD 76294	08 50.1	+6 20	"	"	"		00:55	01:33	A
34079F	Focus			"	"	9'	44°F			B
34080	HD 101501	11 35.8	34 46	"	"	9'.5	"	01:52	02:10	B
34081	HD 77247	08 56.3	53 30	"	"	13'.5	"	02.26	02:[illegible]	A

Dome Temp. +07° 71%

Focus .....

Dome Temp. 0°F 76%

Transparency Conditions ..... Excellent - s.

cloud sy 20°

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		00 14E	+63 10	1-2"	5.0	K3L6	6-6-6	Water ice prog	200/130		(GUIDING) FINE
		02 06W	48 03	2"	8.5	G5	6-6-6	"	800/250	Cloud	FINE
		00 07W	49 22	1-2"	5.1	K3L6	6-6-6	"	200/130	"	*
		00 13W	25 14	"	3.1	G8L6	9-9	"	40/22	"	FINE
		0037E	—	"	K2	K0III	9-9	"	40/22		SL. STR FINE -
		0023W	14 44	"	5.0	K3L6	6-6-6	"	200/130		FINE
		02 59W	49 22	2"	5.1	K5L66	6-6-6	"	200/130	Cloud	SL. WK (GUIDING)
		01 14W	+06 08	3"	3.1	K0 III	6-6-6	"	200/120	"	FINE
			Cloud				3/3	no filter			SCANNING TO VIOLET
		00 00E	+34 16	1-2"	5.2	G8V	6-6-6	Wat ice prog	200/100		FINE
		0230W	53 12	2"	8.1	K0p	6-12	"	800/90	Cloud ended	VERY WEAK
										* BADLY OUT OF FOCUS - ~~PLATE IN SPECTROGRAPH WAS SIDE DOWN.~~	

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Date Feb 3-4 Wed. Thurs 1971 **Observer** Hd-Ri/Ri-Gz **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34082	HD 65934	07 56.1	+26 55	G12	IIaO	13/0.3	15°F	23 : 53	01 : 16	B
34083	HD 75935	08 47.9	+27 18	"	"	13/0.3	15°F	01 : 46	02 : 23	C
34084	HD 93702	10 44.0	+11 04	"	"	9/0.5	"	02 : 40	03 : 12	A
34084F1	focus test	on axis		G12	IIaO	9	15°F			B
34084F1	calibration	stig wedge for plate 34082-4							4 Feb/71	
									3	

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. 12°F H=95%

Transparency Conditions SOME HAZE

Focus

Dome Temp. 12°F H - 98%

Ending Time EST	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	B	01:54 W	+26 47	1-2"	8.87	G8III	7-6-6	SEC. STD. VEL.	800/280		FINE
	C	02:10 W	+27 05	4	9.35	G8I	3-15	4	800/50	CUT SHORT; SNOW FLURRIES, TOO HAZY	OUT OF FOCUS
	A	01:03 W	+10 47	4	5.29	A2I	6-6-6	5m PTC. FIN.	400/103	CUT SHORT; SKY COVERED	(GUIDING.) FINE
	3						3-3	no filter			G.O.D.
		MWP-2/	12 min @ 6	6°F	12	90c	.K0				
								SHOULDN'T WATERCO CLEAN-UP THE			
								BLOODY MESS THEY LEAVE BEHIND?			

239

Date Feb 6-7 Sat-Sun 1971 **Observer** Rm-Ri / Has-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34085	RI Aur = HD 31913	04h 59m.3	39°53.3	G12	IIaO	13/.3	27°F	18:25	20:11	A
34086	CO Aur = HD 40457	05h 53.8	35°19	G12	IIaO	13/.3	26°F	20:16	21:40	B
34087	T MON HD 44990	06h 19m49s	+07° 08.4	G12	IIaO	13/.3	25°F	21:46	22:25	A
34088	ζ Gem HD 52973 RT Aur	06h 58m 11s	+20° 43.0	G12	IIaO	9/.5	24°F	22:32	22:45	B
34089		06h 22m 08s	+30° 33.3	G12	IIaO	9/.5	24°F	22:51	23:14	A
34090	U MON	07h 26.0	−09° 34.1	G12	IIaO	13/.3	24°F	23:20	00:28	B
34090F1	four star out of focus IR Photometer			G12	IIaO	9		00:30	02:00	B
34091	HD 120874	13h 47.1	+59° 02	G12	IIaO	9/.5	21F	02:26	03:04	A
34092	HD 133473	14h 02.5	−10° 41	G12	IIaO	13/.3		03:16	06:00	B
									12	

Dome Temp.
Focus
Done Temp.

Hour Angle End

Dome Temp. 24°F ... 78% Transparency Conditions ... excellent until 02:00 ... hazy after that

Focus .....

Dome Temp. 18°F 86% NB . DO NOT USE P.H. C

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
10 1.	A	04 00	+40° 00'	2	8.0 -	F -	6-6-6	Cepheid/Evans	800/		
40	B	04 30 W	+35° 23'	2	7.7 -	F5	6-6-6	RV Tau/Dy	800/800		
25	A	04 50 W	+07° 10'	2-3	6.4- 7.96	F2Iab K1Iab	6-6-6	Cepheid/Evans	400/150		
45	B	04 33 W	+20° 42'	2	4.44 5.20	F7Ib G3Ib	6-6-6	Cepheid/Evans	200/110		
14	A	1 35 W	+30° 35'	2	5.3 6.5	F1 B0	6-6-6	Cepheid/Evans	200/110		
0	B	1 29 W	-09° 39'	2	6.1 8.1	F8 K0	6-6-6	RUTHall Dy	400/150		
	B						3-3	no filter			
40											
	A	1h 56 E	+58° 41'	3-4	6.36	A0	6-6-6	Spec. Bin/Gorza?	400/200		
00	B	0 45 W	+11° 01	4	8.5 (-)	F5	3-3-3-9	Spec Bin	800/140	clouds	

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Watalee

Date Tues Wed Feb 9-10 197 Observer JHM - Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34093	BD +47° 781	03h 06.4m	+47° 43'	G 12	IIaO	13/.3	20°F	18:26	20 41	A
34094	HD 45829	06h 24.6	+07° 59	G 12	IIaO	13/.5	16°F	21.06	23h 05m	B
34095	HD 77247	08h 56.3	+53° 30	G 12	IIaO	13/.3	14°F	23h 16m	00: 34	A
34096	HD 106690	12h 11.1	+41° 13	G 12	IIaO	9/.5	13°F	00:47	02:28	B
34097	HD 109510	12h 30.1	+18° 56'	G 12	IIaO	9/.5		02: 36	03: 31	A
34097F1	focused	on ad/wire		G 12	IIaO	9				B
34097 F1	calibration	strip made	for plates	34093 - 34097					10 Feb 71	

Dome Temp. 16
Focus
Dome Temp.

Dome Temp. 16°F 71%

Focus .....

Dome Temp. 08°F 76%

Transparency Conditions ..... good until 03:00 hr clouds

mid lunar eclipse

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2h 30m W	+48° 04	3	8.5	G5	3-3-3 3-3-3	waterloo P.N.G.	300/300		FINE
1h 38m W	+08° 00	3	6.8	KOIa	6-6-6	"	400/300		V. SC. WR
0h 34m W	+53° 15	3	8.1	KOp	6-6-6	"	300/350		FINE
0h 47m E	+40° 52	3	7.4	MOIII	6-6-6	"	400/400		FINE
04 03 E	+18° 35	3	6.84	FIII	6-12		400/104	clouds	SC. WR
					3-3	no filter		clouded out	GOOD
2 comp. 2/ 9.0 min @		60°F	/	40c	KO				

Date Wed-Thurs Feb 10-11/71 Observer HD-Jn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End	D
34098	HD 23169.	03 37.9	+25° 25	G12	IIaO	1.3/1.3	17°F	18 20:	19:30	A	01.54W	2
34098 1	calibration stp wedge							11 Feb/71				

Dome Temp. 15°
Focus
Dome Temp.

Dome Temp. 15°F H= 74%

Transparency Conditions good - cloud by 19h

Focus .....

Dome Temp. .....

244

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
130		0054W	25 43	1-2'	7.39	G2V	3-3-3 3-6	SSV	300/170	cloud by 19h	FINE
		moon 4/15 min @ 68°F					2 foc. runs				

245

Date Thurs-Fri Feb 11-12/71 Observer Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34099	MD 23324	03 39.2	+24 32	G12	IIaO	9.5	17°	18:27	18:57	B	W
34099.1	calibration slit wedge				3 a0				15 FEB 71		
3											
									1		

Done Temp. 4
Focus
Done Temp.

Dome Temp. 28°F   H = 85 %

Focus

Dome Temp.

Transparency Conditions scattered cloud high cirrus
much cloud at 19h

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2.57	B	00 23W	+24 49	2"	5.64	B8V	6-6-6	sp Bin	200/60	cloud	FINE
		mwp-2/	15 min @	68°F / 2	20oc 1 K 0						

247

Date Mon-Tues Feb 15-16/71 Observer Pn-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34100	HD 86812	09 55.9	+29 00	G12	IIaO	13/.3	22°F	01:48	03:36	A	0: 034
34101	HD 152224	16 49.7	+32 37	G12	IIaO	9/.5	20°F	04:44	06:02	B	1 21E
34102	HD 130841	14 [illegible]	-15 38	"	"	"	19°F	06:13	06:15	A	0054
~~34103~~	~~HD130109~~	~~14 44.2~~	~~+2° 19'~~	~~"~~	~~"~~	~~"~~	~~"~~	~~06:24~~	~~06:28~~	~~B~~	~~0 04~~
34102F	Focus Plate			"	"	9	19°F		—	B	
34102 T1	calibration	step wedge			IIaO		for plates 34100 — 34102			16F-6	

Dome Temp. 20°F H=84%

Focus

Dome Temp. 17°F H=84%

Transparency Conditions Clear by 00:30

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		03 03W	+28 43	2"-3"	9·2	F8	3-3-3 3-6	———	800/150	wrong star Fld drawn	WEAK
		01 20E	+32 37	11	6·26	KOIII	6-6-6	spEin-Gz	200/140		FINE
		0054W	-15 50	4"	2·89	Am	9-9	spEin-Fin	40/17		FINE
		~~01 10W~~	~~+02 04~~	~~2"-3"~~	~~3·74~~	~~AOV~~	~~9-9~~	〃	~~40/17~~	Prism coming last ?	
										← Broken - Discarded	
			in in/out/out				3/3	no filter			VERT SLIGHT CENTRE TO RED
		NWP-2	9.0 min @ 68°F	/2 doc IKs							

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Date Tue-Wed Feb 16-17/71 **Observer** Rm-Tm **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34103	1x Aur = HD 31913	04h 54.5	31°48.7	612	5.0	13/.3	24°	18:38	21:06	A	
34104	T Mon AD 44990	06 19.8	+07° 08	"	"	"		21:14	22:14	B	
34105	3 Gem = HD 52973	06 58.2	+20 43	"	"	9/.5		23:43	00:13	A	
34106	HD 120787	13h 46.5	61° 59	"	F.O	13/.3	24°	00:33	02:33	A	01 46E
34.00 7.	calibration step wedge				I a O				17 Feb		WWV 4
	FEB 17/18/71								8		
	Cl...										
	S...										

Dome Temp. 20°F H=82%

Focus

Dome Temp. 20°F H=92%

Transparency Conditions hazy ... cloud

Complete Cloud @ 2:30

250

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1h 35 W	+40° 00′	1"-2"	4.0 -	F8 -	6-6 6	Cepheid/	800/250		V. Sl. WR
1h 20 W	+7 10′	2"	6.4 - 7.96	F7 lab - K lab	6-6 6	"	400/126	cloud	FINE
2h 47 W	+20 42	1"-2"	4.11 - 5.20	F7 lab - K lab	6-6-6	"	200/100		FINE
01 46 E	+61 40	"	6.05	K0	666	G1001	800/330	very hazy	FINE
								Cloud by 2:30	
mwr 2/ 9.0 min @ 68°F			Rapcino					Closed	

Date TAUR/FRI FEB 18-19 Observer HR + Dy Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34107	HD 42397	06 05.4	+25 02	12	IIaO	13/.3	34	19 12	21 18	A	
34108	U Mon	07 26.0	-9° 34	12	IIaO	13/.3	34	21 27	22 40	B	
34108 71	calibration step wedge				IIaO				19 Feb 71		

Dome Temp. 3
Focus
Dome Temp.

Dome Temp. 31°F H 91%

Transparency Conditions FAIR, HAZE

Focus .....

Dome Temp. .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
21 18	A	0^h 44 W	+2505	3-4	8.68	G_0 II	4-4-4 4-2	SSV	800/300		V. SL. WK
[illegible]	[illegible]	0^h 47 W	-9 4/0	3-4	~7m	G5	3-3-~~4~~2	R/TAn	800/128	Complete [illegible].	VERY WEAK
[illegible]		MWP-2/ 10 min @ 68°F/2 roc IIIO									

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Date Sun/Mon Feb 20-21/22 Observer Ea Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34109					IIaO		30°			

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. 25°76%

Transparency Conditions .....

Focus .....

Dome Temp. .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality

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Date THUR/FRI FEB 26 Observer Dy-Ri/Ri-G2 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34109	CO Aur	05 53.2	+35 19'	12	IIaO	13/.3	36°F	18 39	2001	A
34109F1	focus test	out of focus		G12	IIaO	9	34°F			B
	PHOTOMETRY		$20^h \rightarrow 0^h$						2	
~~34110~~	~~HD 75935~~	~~08 47.9~~	~~+27 11~~	~~G12~~	~~IIaO~~	~~13/0.3~~				

Done Temp.
Focus
Done Temp.
Hour Angle End

Dome Temp. 30° 90% How about an

Focus ..... observers Handbook

Dome Temp. 30°F 95% for the Dome (1971)

Transparency Conditions good

0 - VERY DENSE FOG

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	0h 06W	+35 24	~3	~8	F5	4-4-4 6	RV Tau	800/271	got some water on the mirror from where known where	FINE
	B						3-3	no filter			C. TO R.
					9.35	G8V			800/270		
								CLOSED UP AT 0:15 ; FOG TOO THICK			
		NWP 2/12 min @ 00° E					2G Feb/71		240 c ISO		

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Hns Iris Plot

Date Mar 1-2 '70 Mon-Tues **Observer** Blu-Th / Th **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34110	20 Ori	4h 45m .2	+8° 04'	G-12	IIa-O	13/.5	34°F	18:44	18:45	A
34111	HD 37519	5h 34m .1	+31° 18'	"	"	"	33°F	18:56	19:26	B
	Iris	Plot	19:30 →		02:30					
34112	HD 91948	10 31.9	+60 38	G12	IIaO	13/.5	23°F	02:43	04:05	B
34113	HD 153720	16 56.0	+75 34	"	"	"		04:14	05:50	A
34114	HD 148857	16 25.9	+2 12	"	"	"	27°F	05:57	06:09	B
34114 F1	Focus			"	"	13	"			B
34114 "	calibration slip undone				IIaO			2 March 1971		

Dome Temp. 28° 64%

Transparency Conditions Excellent

Focus .....

Dome Temp. 20°F 75%

NB: THE KODAK BRUSH IS FOR (CAREFULLY) BRUSHING DUST FROM PLATES BEFORE EXPOSURE - HOW ABOUT LEAVING THE BRUSH IN THE N. PIER DARK ROOM FOR ALL TO USE?

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
9-7	A	00 20 W	+8° 5'	3"	4.72	AOV	6-6-6	Sp-Bin-Bl	45/18		FINE
9-26	A	00 08 W	+31° 25'	"	6.43	BTV	6-6-6	"	40c/200		FINE
4-05	B	03 50 W	+60 19	2-3"	7.37	F8	6-6-6	Sp Bin-52	440/250		FINE
5-10	A	00 44 E	17 52 8	"	6.84	FO	6-6-6	"	200/110		(GUIDING) FINE *
7-09	B	00 00	+02 05	3-5"	3.86	AIV	10-10	Sp Bin-Bl	40/18	thick cloud & glare	FINE - STR. SC.
		m.i. [illegible]					3/3	no filter			GOOD
		NGC-21 4.0 min @ 68°F / 2400 IKO								Telescope zoom very slow.	
										* FOG + ABRASION MARKS	

Date Mar. 2-3/71 Tue-Wed **Observer** Rm-Tn/Pt-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34115	TMon = HD 44990	06 19.8	+07° 5'	G12	IIa-O	13/3		19[h]08	20:20	B	01[h]41[m]
							27°F	21:00	21:17		
34116	W Gem =	6[h]34.2	+15°37	G12	IIa-O	3/3		21:52	[illegible]	A	[illegible]
34117	HD 91946	10 31.9	60 38	"	"	13/5	22°F	02:24 (116)	04:20	B	01[h]59[m]
34117 T1	calibration step wedge				IIa-O			3 March 1971			

Dome Temp. 7
Focus
Dome Temp. 4

Dome Temp. 25° 68°

Focus .....

Dome Temp. 18 ..... 74°

Transparency Conditions ..... scattered cloud
very bad seeing

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0.1 47W	+7° 10'	6-8	6.4-7.96	F7 sub-K2	6-6-6	Cepheid-Evans	400/200	cloud	SC WK
		3							
02 42W	15° 25'	2"	7.7-8.9	F6-G5	6-6-6	Cephed-Evans	400/156	Cloud Decided [illegible]	FINE
04 09W	60 19	"	7.37	F2	6-6-6	Sp Bin-62	400/180	Cloud again	(FOGGED) FINE
MWP-2/	9.0 min @ 68°F / 290 CIKO								

Date March 4/5 THUR/FRID 1971 **Observer** Tm-GZ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34118	HD 42397	06 05.4	+25 02	G12	IIaO	13/0.3	25°F	19:42	21:20	A
34119	HD 75755	08 47.9	+27 18	"	"	13/0.3	23°F	21:24	23:26	E
34120	HD 86801	09 55.8	+29 02	"	"	13/0.3	"	23:32	02:02	A
34121	HD 120574	13 47.1	+59 02	"	"	9/0.5	24°F	03:10	02:42	E
34122	HD 110411	12 35.8	+10 47	"	"	13/0.5	"	02:50	02:58	A
34123	HD 130109	14 41.2	+2 17	"	"	13/0.5	"	03:04	03:08	E
34124	HD 130841	14 45.4	-15 38	"	"	13/0.5	"	03:14	03:18	A
34125	HD 141513	15 44.4	-03 07	"	"	13/0.5	23°F	03:25	03:29	E
34126	HD 147203	16 [illegible].0	+29 56	"	"	13/0.3	"	03:41	06:07	A
34126F	FOCUS			"	"	13				E
	PHOTOMETRY: $18^h30 \rightarrow 19^h30$									
34126 T1	calibration strip wedge				IIaO	for plate: 34118, 34121 – 34126				
T2	"						34119, 34120			

Dome Temp. 20°F H=67%

Focus .....

Dome Temp. 20°F H=72%

Transparency Conditions ..... GOOD — STRONG WIND
SEEING ALSO GOOD
Excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01:41 W	+25:05	1-2"	8-68	GOIV	7-3-3-33	SEC. STD.	800/250	CLOSE TO HOBN. BUT COUNTING RATE NOT INFLUENCED BY IT.	* 1 wk.
01:06 W	+27:04	"	9.35	G8V	3-3-5 7	"	800/400		* 1 wk.
02 35 W	+38:45	"	9.48	G0V	3-3-3-3-3	"	800/200		* 1 wk.
00:35 E	+58:43	"	6.36	A0	6-6-6	SPEC. BIN.	400/150		* FINE
00:50 W	+10:28	"	9.17	AIV	6-6-6	Spec. Bin.	40/18		FINE
01:04 E	+02 03	"	3.74	A0V	10-10	"	40/18	(No scintel photos 23)	(Sc. Guiding) FINE
01:00 E	-15:51	"	3.89	Am	9-9	"	40/17	guiding?	FINE
01:45 E	-03:17	"	3.50	A0V	9-9	"	40/17		FINE
00.05 W	+29.51	"	8.90	F1V	3-3-3 3-3-3	SEC. STD.	800/240	Fld Nrwr — DAUN CUT SHORT	1 wk.
					3/3				GOOD
								* 6th plate too red ... poor	
w. up 2/12 min @ 68°E					240 cm O		5	Nwr/71	flare - halo pattern
" 15 min @ 65°E					"				1 hr

Date Tues Mar 9-10/91 Observer Hal Fan./Kn-Em.j Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34127	HD42397	6 05.4	25 02	G12	IIaO	13/3	23°F	19 00	20:38	A
34128	HD 75935	8 47.9	27 18	G12	IIaO	13/3	20°F	20 45	23:35	E
34129	HD 109511	12 30.1	+ 18 56	"	"	9/.5		23:53	00:33	A
34130	HD 109510	"	"	"	"	"	18°	00:35	01:57	B
34131	HD 112033	12 48.4	+21 48	"	"	"	17°F	02:02	02:36	A
34132	HD 124674	14 09.9	+52 16	"	"	13/.5	"	02:43	03:25	E
34133	HD 124675	"	"	"	"	"	"	03:26	03:32	A
34134	HD 131041A	14 46.3	+49 07	"	"	"	"	03:35	04:24	E
34135	HD 131041B	"	"	"	"	"	"	04:26	05:07	A
~~34136~~	~~HD 139195~~	~~15 31.7~~	~~+10 21~~	~~"~~	~~"~~	~~"~~		05:11		B
34135 Fl	Focus			"	"	13	17°F			B

Dome Temp. 20°F H= 65%

Focus .....

Dome Temp. 18°F H= 72%

Transparency Conditions Excellent
almost Full Moon
thin cloud by 22h

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
.01 :20W	+25 06	2"	8.68	GoW	3,3,3 3-3-3	Sm Std Vel	800/290		Fine
01:35W	+27 06	"	9.35	G8V	3-3-3 3-3-3	" " "	800/260	moonlight detectable but < 10% near Moon (15°) + light clouds.	Fine
01:09E	+18 36	"	6.22	K2III	7-7-7	Vis Bin-Wat	200/160		(GUIDING) * FINE
00:15W	"	"	6.84	FIV	7-6-6	"	400/260		(GUIDING) * FINE
00:36W	+21 28	2"-3"	5.86	K0	6-7-6	"	200/160		FINE
00:04W	+51 58	"	6.61	F0	6-7-6	"	200/120		FINE
00:11W	"	"	4.60	A8	10-10	"	40/18		FINE
00:27W	+48 52	2"	6.8	F0	6-6-6	"	200/120	South of Pair Diff to Dist [illegible]	(GUIDING) * FINE
01:10W	"	"	7.5	F5	6-6-6	"	400/240	No Moon noise interference	FINE
~~—~~	~~+10 09~~	"	~~5.4~~	~~K1p~~	~~6-~~	~~Color typ sat~~	~~200/60~~	cloud all Down	GOOD
	min int. L				7/3	no Filter			
								* FOG	

Date THUR/FRID MARCH 11/12 1971 Observer Tn-GZ Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34136	T MON HD 44990	06 19·8	07 08	G12	Tri-X	13/0·3	39°F	19:00	19:56	B	
34137	HD 37171	05 31·5	10 58	"	"	13/0·5	"	20:00	21:10	A	
34138	HD 82191	09 25·4	+27 50	"	"	13/0·5	27°F	21:15	21:49	B	
34139	HD 91948	10 31·9	+60 38	"	"	13/0·5	"	21:55 (44)	22:41	A	
34140	HD 73871	08 43·6	+20 25	"	"	13/0·3	"	22:46	23:10	B	
34141	HD 86801	09 55·8	+29 02	"	"	13/0·3	25°F	23:16	01:30	A	
34142	HD 82191	09 25·4	+27 50	"	"	13/0·5	"	01:34	02:20	B	
34143	HD 91948	10 31·9	+60 38	"	"	13/0·5	"	02:35 (44)	03:11	A	
34144	HD 140913	15 41·1	+28 47	"	"	13/0·3	24°F	03:20	05:32	B	
34145	HD 153714	16 47·0	+33 44	"	"	13/0·5	"	05:26	06:00	B	
34145 F1	Focus			"	"	13	23°F			A	
F2	"			"	"	13	"			B	
34145 T1	calibration for plate		34129–	34135					12 March 71		

Dome Temp. 25°F H=74%

Focus .....

Dome Temp. 20°F H=83%

Transparency Conditions ... Excellent

Ending Time EST	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		00:31 W	+07:10	~2"	64-8.0	F7-K1	6-6-6	CEPHEID-EYMNG	400/200		FINE
		02:34 W	+11:05	2-3"	5.98	K5III	6-6-6	SPEC-BIN	400/320		(WEAK FOG) SL. WK
		00:41 E	+27:36	"	6.59	A0	6-6-6	"	400/200		(GUIDING) FINE
		00:56 E	+60:20	"	7.37	F8	6-6-6	"	400/240		(GUIDING) * FINE
		01:20 W	+20:38	1-2"	7.0	A	6-6-6	G1001	400/135		(WEAK FOG) FINE
		02:30 W	+28:45	2-3"	9.48	G0V	6 3-3-3-3	SEC. STD. VEL	800/200	POOR SEEING (6EU 15m)	BAD FOG WEAK
		03:50 W	+27:25	"	6.59	A0	6-6-6	SPEC. BIN.	400/200		* FINE
		01:25 W	+60:20	2"	7.37	F8	6-6-6	"	400/240		* FINE
		00:39 W	+28:36	1-2"	8.81	G0V	3-3- 3-3-4	SEC. STD. VEL.	300/300		* FINE
		00:10 W	+32:40	"	6.36	K5III	6-6-6	SPEC. BIN.	400/240	DAWN CUT START	(GUIDING) * FINE
							3/3			check for FOG (dropped)	GOOD
			"				3/3				GOOD
		new WP: 8/9.0 minutes @			68°		2 40C IKO			* FOG (NOT BY LIGHT)	

Date FRI/SAT MARCH 12/13 1971 Observer TN-DY Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34146	α Mon	7h 26.0	-09° 34.1	B12	IIa-O	13/0.3	29°	1950	21:04	A	0h 15M W
34147	HD 52973	6 58.2	+20 43.0	B12	IIaO	9/.5	"	2115	21:41	B	0 45M W
34148	HD 58715	7 21.7	+8 29	"	"	13/.5	24°	2148	21:55	A	1 33M W
34149	HD 73262	8 32.4	+6 03	"	"	13/.5	"	2204	22:—	B	0h 36M W
34150	HD 74280	8 38.0	+3° 45	"	"	"	"	2220	22:36	A	0 58M W

Dome Temp. 2
Focus
Dome Temp.

Dome Temp. 24° H=84%

Focus

Dome Temp. 25° H=85%

Transparency Conditions very hazy (Hot visitors)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0h38W	−9° 39′	2"-3	~7m	G5?	7-6-6	RV Tau	400/200	old plate Batch	FINE
01 42W	+20 40	2"	~5m	G0	6-6-6	CEPHEIDS - EVANS	200/130	" cloud	FINE
01 32W	+8° 25′	2"	2.74	B7V	10-10	Sp Bin-Bin	40/18	new batch (cloud	FINE
0h43W	+5 53	2"	4.14	A0V	6-6-6	Sp Bin-Bin	200/90		FINE
0 58W	+3 35	2"	4.10	B3V	10-6-3	"	200/90	heavy [illegible]	(GUIDING) FINE

Note Tom & Dan watched a corner of the optical wheel may have been leaking light + housing plates Ned

Date Sat/Sun March 13/14/?? **Observer** DH-Tn/GI-Td **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34151	HD 73210			G12	IIIa.O	13/0.3		19 16	19:56	A	
34152	HD 46 595	06 29.3	15° 25'	G12	IIIa.O	13/0.3	32°F	20 04	21:04	B	
34153	HD 73575			"	"	"	"	21:10	22:00	A	
34154	HD 73785			"	"	"	"	22:09	23:09	B	
34155	HD 73813			"	"	"	"	23:18	00'22	A	
34156	HD 102194	11 42.7	-27 53	"	"	"		00:43	01 '50	B	

Rmov. plates for more development.

Dome Temp. 30°F H=91%

Focus 0

Dome Temp. 28°F H=100+%

Transparency Conditions Hazy very hazy

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	L	01 38E	+19 25	1"	7.1	A	6-6-6	G1001-[illegible]	400/145		FINE
04	[illegible]	01 38W	+15 26	2"	8.	F6-G5	6-7-6	Cepheid	400/170		FINE
[illegible]	A	00 30W	19 56	2"	7.0	F0	6-7-6	G1001-11	400/170		FINE
[illegible]	L	01 37W	19 53	1"	7.1	A	6-7-6	"	400/140	fog-[illegible]	FINE
22	A	02 50W	19 45	1"	7.0	A	6-7-6	"	400/120	H=100% +	U.S.L. WK
50	L	01 12W	+27 34	1"	8.26	G & IV	3-3-3/0	S S V	200/120	Heavy fog [illegible] dew [illegible]	WEAK (but measured)
										Closed 02h	

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Date Sun/mon March 14/15 71 **Observer** DE-Tq **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34157	HD 73618			G12	IIa.O	13/03	30°	20:10	22:04	A	
F	Focus ±c+			"	"		"			B	
34157 71	calibration: plates 34146 - 34155, 34157								15 mar/71		

Dome Temp.
Focus
Dome Temp.

Dome Temp. 35°F H:39%

Transparency Conditions Hazy

Focus .....

Dome Temp. .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	A	00 38W	1944	3"	7.6	A	6-6	G1001 DE	400/140	Exp Meter-no work	WEAK
			[illegible]				5/3	no filters		clouds (thin)	sl. c. to ECD
										Closed 10h15	
										Went home early	
										because Telescope	
										not really usable,	
										sky no good either	
										Tq	
		Mun. 2 / 9.0 mm @ 68°F / 2402 KO									

Date Mar Tues Mar 15/16/71 **Observer** Bh-Tq **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34158	HD 37519	05 34.1	+31 18	G12	IIaO	13/5	41°F	21:00	21:48	A	03 24W
34159	2 Cam.	07 21.7	+8 29	"	"	"	"	21:51	21:53	B	01 44W
34160	4 Hya	08 33.4	+6°03	"	"	"	"	21:59	22:04	A	00 47W
34161	7 Hya	08 38.0	+3 45	"	"	"		22:07	22:13	B	01 41W
34162	22 Hya	09 09.2	+2 44	"	"	"		22:18	22:50	A	03 24W

Done Temp. 4
Focus
Done Temp.

Dome Temp. 40° H=75%

Focus .....

Dome Temp. 35° H=86%

Transparency Conditions Scattered cloud
High wind

Ending Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1 42	A	03 24W	+31 26	2"-3"	6.03	B7V	6-7-6	Sp Bin-Eta	200/100	Some cloud	FINE
3	B	01 44W	28 25	"	2.74	B7V	10-10	"	40/18		USE STR
44	A	00 42W	+5 24	2"	4.14	A0V	10-10	"	40/18		FINE
13	B	00 46W	+3 34	2"	4.10	B3V	10-10	"	40/20		SL. STR
2 51	A	00 53W	+2 31	"	3.82	B7.5Vp	10-10	"	200/36	Cloud [illegible]	[illegible]

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Date Tues - Wed mar 16/17/71 **Observer** Th - Gaz **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34163	HD 58715	07 21.7	+8 29	G12	IIaO	13/1.5	32°F	19:36	19:44	B
34164	HD51892	06 53.9	+7 27	"	"	9/1.5	"	19:58	21:20	A
34165	HD 82191	09 25.4	+27 50	"	"	13/0.5	31°F	21:27	22:35	B
34166	HD 91948	10 31.9	+60 38	"	"	13/0.5	30°F	22:42		A
34166	HD 72208	08 26.5	+10 09	"	"	13/0.5	30F	22:57	00:13	B
34167	HD 103494	11 42.7	+27 53	"	"	13/0.3	28F	00:20	02:54	A
34168	HD 152234	16 47.0	+32 44	"	"	13/0.5	26°F	03:01	04:19	B

Dome Temp. 27
Focus
Dome Temp.

Hour Angle End

Dome Temp. 27°F H=75%

Focus .....

Dome Temp. .....

Transparency Conditions ..... Cloud at first → GOOD
POOR SEEING - STRONG WIND

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3'44	B	00'22E	+38° 26'	3-5"	2.74	B7V	6-7-6	SpBin-Blg	200/85	Thru cloud	FINE
2 32	A	01:41W	+07 26	3-4"	6.35	B7V	6-6-6	SpBin-Gz	200/100		*FINE
1 [illegible]	B	00:25W	+27 36	2-3"	6.59	A0	6-6-6	SPEC. BIN.	400/200		** *
[illegible]		[illegible]	+60 20		7.37	F8	6-	"	400/[illegible]	WIND TOO STRONG	
11 3		03'02W	+09 57	2-3"	6.58	A0	6-6-6	"	400/200		*FINE
12 [illegible]		[illegible]:27W	+27 35	1-2"	8.26	G8IV	3-3-3 3-3-3	SEC. STD. VEL.	800/270	thick haze	** *
1 3		01'10E	+33 40	2-4"	6.26	K0III	6-6-6	SPEC. BIN	400/120	" " CUT SHORT	*SC. WR.

* FOGGED

** DOUBLE EXPOSURE

Date WED/THUR MARCH 17/18 1971 Observer Eq-GZ/Ri-GZ Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34169	HD 82191	09 25.4	+27° 50'	G12	IIaO	13/0.5	30°F	20:38	21:34	B	
34170	HD 91745	10 31.9	60 38	"	"	13/0.5	29°F	21 41 (72)	22:53	A	
34171	HD 78205	08 26.5	+10 09	"	"	13/0.5	28°F	23 08	00:16	B	
34172	HD 81995	09 24.1	+45 12	"	"	13/0.5	27°F	00:21	01:31	A	
34173	HD 91745	10 31.9	60 38	"	"	13/0.5	26°F	01:36 (53)	02:38	B	
34174	HD 153720	16 56.0	+75 34	"	"	13/0.5	25°F	02.38	03:53	A	
34175	HD 154523	17 00.9	+77 48	"	"	13/0.5	24°F	04:00	04:40	B	
34176	HD 154324	16 47.0	+32 44	"	"	13/0.5	24°F	04:46	05:50	A	
34176F1	FOCUS TEST	OUT OUT	IN IN	G12	IIaO	9	23°F			B	

Dome Temp. 27°F H=68%

Transparency Conditions CLOUDY → GOOD → EXCELLENT

Focus

Dome Temp. 20°F H=80%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00:33 E	+27 35	2-2"	6.59	A0	6-6-6	SPEC. BIN	400/200		(SL. GUIDING) FINE
~~00 20E~~ 10W	+60 20	1-2"	7.37	F8	6-6-6	"	400/260		(GUIDING) FINE *
03:08 W	+ 9 59	~2"	6.58	A0	6-6-6	"	400/200		(SL. GUIDING) FINE *
03:26 W	+44° 59	"	7.12	A5	6-6-6	"	400/200		FINE *
03:15 W	+60 19	"	7.37	F8	6-6-6	"	400/260		FINE *
01:39 E	+75°28'	"	6.84	F0	6-6-6	"	400/260		(SL. GUIDING) FINE *
22:55 E	+77 42	"	6.66	A0	6-6-6	"	400/200		FINE
00:25 W	+32 38	"	6.26	K0 III	6-6-	"	400/200		FINE *
					3-3	UV FILTER			GOOD
								DAWN	
								* FOG	

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Date THUR/FRI MARCH 18/19 1971 Observer R-G2 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34177	HD 82191	09 25.4	+27° 50	G-12	IIaO	13/0.5	32°F	21.02	21:56	A	00 10 E
34178	HD 91948	10 31.9	+60 38	"	"	13/0.5	32°F	22:01	23:04 (60)	B	00 11 E
34178 F1	same as 77	on 70 mm.		G-12	IIaO	9	32°F			B	
34179	HD 93702	10 44.0	+11° 04	"	"	13/0.5	32°F	23:25	00:21	A	0 00 W
34180	HD 102111	12 36.8	+10 47	"	"	13/0.5	31°F	00:26	00:36	B	00 36 W

Dome Temp. 30°F 85%

Transparency Conditions CLOUDY → HAZY

Focus .....

Dome Temp. 28°F 91%

UNEXP. PLATE BOX # ___ (DON'T LEAVE UNEXP. PLATES IN DOME)

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	00:07 E	+27° 35	~2"	6.59	A0	6-6-6	SPEC, BIN.	400/200		(GUIDING) FINE
	B	00:09 E	+60° 20	1-2"	7.37	F8	6-6-6	"	400/130	CLOUDS! CUT SHORT	(GUIDING) SL. WK
							3-3	no filter			CENTRE TO RED
		01:00 W	+10 45	1-2"	5.29	A2I	6-6-6	Blu. SPEC. BIN.	400/200	HEAVY HAZE	FINE
		~~00 39 E~~	~~+10 26~~	"	~~4.97~~	~~A1E~~	~~6-12~~	"	~~400/200~~	~~CUT SHORT + CLOUDS~~	
										CLOUDY : 1h	

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Date Sun/Mon March 21/22 1971 **Observer** G.L.R. / Ed-R. **Julian Day**

Done Temp.
Focus
Done Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34180	HD 43044 E	06h09m.0	+14° 38'	G12	IIaO	13/.3	33°F	19:13	20:45	A	
34181	HD 60180	07h28m.2	+28° 38'	G12	IaO	9/.3	32°F	20:55	23:37	B	
34182	* 91941	10h31.9m	60° 38'	G12	IIaO	13/.5	29°F	00:04 (113)	01:57	A	
34182F1	FOCUS TEST			G12	IIaO	9	28°F			B	
34183	HD 110411	12 36.8	+10° 47	G12	IIaO	9/.5	27°F	02.37	03:13	A	
34184	HD 141527	15h [illegible]m E	+38° 28'	G12	IIaO	13/.5	26°F	03:20	04:16	B	
34185	HD 152224	16 47.0	+32 44	G12	IaO	13/.5	27°F	04:20	05:19	A	
34186	HD 148857	16 25.9	+22° 12	G12	IIaO	9/.5	27°F	05.29	05:39	B	
	* HD 91948 ?										

Dome Temp. 30° F - 66%

Focus .....

Dome Temp. 24° F - 74%

Transparency Conditions hazy

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		$02^h\ 11^m W$	+14° 40	3	(7.7) 6.80?	B9p	6-6-6	G1 Aptm	400/150	brighter following comp., ft. comp.	* (GUIDING) FINE
		$03^h\ 43^m W$	+28° 33	3	7.7	B9p	6-6-	"	400/1[illegible]		* (GUIDING) FINE
01 59	A	$03^h\ 00^m W$	60° 20'	3	7.37	F8	66-6	Spect. Bin G2	400/150		* FINE
							3-3	no filter		too hazy	GOOD
3		$02^h\ 12 W$	+10° 27'	3	4.97	AIV	6-6-6	BL SPECT. BIN	200/100		(GUIDING) FINE
10		$00^h\ 02 W$	+28° 17'	3	6?	G0p	6-6-6	G1001	400/260	May be fogged ← NO open slide without cap on Plate	* FINE
	A		+39° 32'		6.26	KOIII	66[illegible]	Spect. Bin G2	400/320		* FINE
57	B	$04^h\ 50 W$	+020 05	3	3.86	AIV	6-6-6	BL Spect. Bin.	200/100		FINE
										DAWN	
										* FOG	

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Date Mon - Tues Mar 22/23 Observer L - B/n-R; / R; Julian Day

NO OBSERVER

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34187	2 Ori	04 45.2	+8° 44'	G-12	IIa-O	13/.5		19:05	19:10	A	
34188	HD 37519	05 34.1	-34° 18'	"	"	"		19:19	19:53	B	
34189	70 Ori	06 06.8	+14 30	"	"	"		19:57	20:05	A	
34190	69 Ori	06 06.3	+16 09	"	"	"		20:17	20:28	B	
34191	18 Gem	06 23.0	+20 17	"	"	"		20:34	20:39	A	
34192	HD 53755	07 01.1	-10 30	"	"	"		20:45	21:43	B	
34193	HD 71663	08 23.4	-21	"	"	13/.3		21:50	22:56	A	
34194	53 Leo	10 44.0	+11 04	"	"	3/.5		23:00	23:24	B	
34195	40 Leo	10 14.3	+19 57	"	"	"		23:28	23:51	A	
34196	HD 110411	12 36.8	+10 47	"	"	"		23:55	00:11	B	
34197	HD 112325	12 55.3	+27 11	"	"	1/.3		00:15	00:52	A	
34198	HD 9945	10 31.9	+60° 38	"	"	13/.5	26°F	01:00 (96)	02:38	B	
34199	HD 130841	14 45.4	-15° 38	"	"	"	26°F	02:46	02:52	A	
34200	HD 130109	14 41.2	+02 09	"	"	"	"	02:58	03:04	B	
34201	HD 153720	16 56.0	+75° 34	"	"	"	25°F	03:17	04:50	A	
34202	HD 154528	17 00.9	+77° 49	"	"	"	25°F	04:56	05:43	B	

Dome Temp. 24°F 68%

Transparency Conditions Hazy

Focus .....

Dome Temp. .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		02 03W	+8°55'	2"	4.32	A0V	10-10	Sp. Bin	40/19	{ PECULIAR FOG PATTERN AT RED END OF BOTH PLATES	(SL. GUIDING,) FINE
		01 55W	+31°26'	"	6.03	B7V	6-6-6	"	200/100		FINE
		01 37W	+14 17	"	4.18	B3V	10-10	"	40/18		SL. STR
		01 59W	+16 13	"	4.73	B5V	10-10	"	40/20		SL. STR
		01 54W	+20 30	"	4.04	B7IVe	10-10	"	40/20		STRONG
		02 23W	-10 34	"	6.43	B0V:	6-6-6	"	400/200	Companion ~ 8" West very ft.	FINE
		02"11W	-2 21	1-2	6.72	dF0	6-6-6	"	400/160	FOG	BADLY OUT OF FOCUS
		00"19W	+10° 45	2-3	5.29	A2V	6-6-6	"	40/20		FINE
		01"15W	+19° 40	2	5.27	F6 IV	6-6-6	RV std.	80/52		FINE
		00 46E	+10° 27	2	4.97	A1V	6-6-6	Sp Bin	80/40	(V.SL. FOG)	FINE
		00"16W	+26° 52	2	5.47	g/c2	6-6-6	"	400/196	(V.SL. FOG)	FINE
		03"45W	+60° 20	2	7.37	F8	6-6-6	Spect. Bin.	400/260	FOG	FINE
		004 14 E	-15° 52'	2	2.89	Am	10-10	"	20/10		FINE
		004 04W	+020 02	2	3.74	A5V	10-10	"	40/20		FINE
		00M21E	+75° 30'	2	6.84	F0	6-6-6	"	400/250	FOG	FINE
		00"29W	+77° 43	2	6.66	A0	6-6-	"	400/200	FOG	FINE

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Date Mon.-Tues. Mar 22/23 Cond. **Observer** R. **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle East
3402	focus test	out and/in		G12	IIaO	9	25°F			B	

Dome Temp. .....

Focus .....

Dome Temp. 20° F 68%

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
					3-3	no filter			GOOD
								DAWN	

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Date Tues-Wed Jan 23-24 1971 **Observer** Ri - Emi **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle East
34203	H.D 112033	12 48.4	21 48	G-12	IIaO	9/1.5	25°F	01:19	02:22	A	
34204	HD 124674	14 09.9	52 16	"	"	13/1.5	24°F	02:42	04:44	B	
34205	HD 124675	"	"	"	"	"	22°F	04:48	05:04	A	
34206	HD 155103	17 04.5	-136° 04	G12	IIaO	13/1.5	21°F	05 09	05 36	B	
34206F1	focus 4Y	on	34/mm	G12	IIaO	9	20°F			B	
34206 F1	calibration	step wedge		for	plate	34203 - 34206			24 hrs.		

Dome Temp. 20°F 67%

Focus

Dome Temp. 15°F 70%

Transparency Conditions clearing after 00h 00 hazy

Reading Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2 22	4	01.18 W	+21° 29'		5.86	K0	6-6-6	Waterloo Visual Bri	200/160		* FINE
1 44	3	02h20W	+51° 58'	3	6.61	F0	6-6-6	"	400/260		* (Sc. Guiding) FINE
2 24	4	02h40W	+51° 59	3	4.60	A0	6-6-6	"	400/200		* FINE
1 36	3	03h16W	+36°00	2	5.71	A5	6-6-6	"	400/200		* (Guiding) FINE
	3						3-3	no filter		DAWN	good
2. hrs		2 WP-2/	9.0 min @	6f°	F /	2	sec	1K •			
										* FOG	

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Date WED/THUR MARCH 24/25 1971 **Observer** Tm-Gz **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34207	HD 359211	05 23.0	+35 22	G12	IIa-F	13/0.5	23°F	19:15	19:57	A
34208	HD 46595 (W Gem)	06 29.2	+15 25	"	"	13/0.5	"	20:04	21:24	E
34209	HD 82191	09 25.4	+27 50	"	"	13/0.5	22°F	21:40	23:24	A
34210	HD 63630	07 44.8	+46 12	"	"	13/0.5	"	22:28	23:18	E
34211	HD 81995	09 24.1	+45 12	"	"	13/0.5	21°F	23:22	00:36	A
34213	HD 82191	09 25.4	+27 50	"	"	13/0.5	20°F	00:40	01:48	B
34213	HD 132693	13 51.2	+25 02	"	"	13/0.5	"	01:59	04:29	A
34214	HD 152720	16 56.0	+75 34	"	"	13/0.5	18°F	04:38	05:32	E

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 20°F H=65%

Focus .....

Dome Temp. 18°F H= 72%

Transparency Conditions Good

Note * - Window cover for spectro-phot. Closed tonight! It had been opened march 3-4 when Prof Ed tryed the photometer. It may have caused the fogging - The date tallies up - Tom

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02:20 W	+35° 26'	1-2"	6.59	O9.5 III	6-6-6	ECH. BIN	400/300		(GUIDING) FINE
22:51 W	+15 28	2"	7.9/8.9	F6/G5	6-6-6	CEPHEID EVANS'	800/200	CUT SHORT; VERY SLOW	WEAK
00:44 W	+27 35	"	6.59	A0	6-6-6	SPEC. BIN.	400/200		(SL. GUIDING) FINE
03:18 W	+46 05	"	6.53	A3	6-6-6	"	400/200		(GUIDING) FINE
23:58 W	+44 58	"	7.12	A5	6-6-6	"	400/150		FINE
24:10 W	+27 37	"	6.59	A0	6-6-6	"	400/200		FINE
23:17 W	+24 47	"	8.74	F8V	3-3-3 3-3-3	SEC. STD. VEL	800/280	FIELD SAME AS PL. NO. 3[illegible]	SL. WK
00:30 W	+75 29	"	6.84	F0	6-6-6	SPEC. BIN.	400/220	Dawn [illegible]	(GUIDING) FINE
								- ALL PLATES SHOW THE FOG	

Date THUR/FRID MARCH 25/26 1971 **Observer** Jm – Gr2 **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34215	Rx Aur HD 31913	04 54.5	+39 49	G12	IIaO	13/0.3	28°F	19 : 17	21 : 00	A
34216	HD 82191	09 25.4	+27 50	"	"	13/0.5	36°F	21 : 05	21 : 37	B
34217	HD 91948	10 31.9	+60° 38	"	"	13/0.5	27°F	21 : 44 (48)	22 : 32	A
34218	HD 63630	07 44.8	+46 12	"	"	13/0.5	26°F	22 : 39	23 : 05	B
34219	HD 82191	09 25.4	+27 50	"	"	13/0.5	"	23 : 08	23 : 44	A
34220	HD 91948	10 31.9	+60 38	"	"	13/0.5	"	23 : 47 (52)	00 : 29	B
34221	HD 82191	09 25.4	+27 50	"	"	13/0.5	25°F	00 : 47	01 : 25	A
34222	HD 153120	16 56.0	+75 34	"	"	13/0.5	"	01 : 34	02 : 10	B
34223	HD 154528	17 00.9	+77 48	"	"	13/0.5	24°F	02 : 44	03 : 15	A
34224	HD 172187	18 33.7	+43 08	"	"	13/0.5	"	03 : 30	03 : 58	B
34225	HD 180316	19 11.0	+27 46	"	"	13/0.5	22°F	04 : 03	04 : 47	A
34226	HD 186547	19 39.9	+13 04	"	"	13/0.5	"	04 : 53	05 : 25	B
34227	HD 161096	17 38.5	+4 37	"	"	"	"	05 : 31	05 : 35	A
34227F	Focus Test			"	"	13	"			B
T1	plates 34223-7									
T2	plates 34215-222									

Dome Temp. 23°F H=63%

Focus .....

Dome Temp. 18°F H=65%

Transparency Conditions Excellent (MERCURY EASILY VISIBLE)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03:55W	+40 00	~1"	8.0-9.0	F8-G8	6-6-6	EVANS' CEPHEID	800/275	→SLOW (SL. FOG)	SL. WK
00:01W	+27 36	1-2"	6.59	A0	6-6-6	SPEC. BIN	400/200		FINE
00:10E	+60 20	<1"	7.37	F8	6-6-6	"	400/260	AMAZING SEEING!	(GUIDING) FINE
03:10W	+46 05	~1"	6.23	A3	6-6-6	"	400/200		(GUIDING) FINE
02:10W	+27 34	"	6.59	A0	6-6-6	"	400/200		(GUIDING) FINE
01:57W	+60 20	1-2"	7.37	F8	6-6-6	"	400/260	(V. SL. FOG)	FINE
03:50W	+27 35	2"	6.59	A0	6-6-6	"	400/200	(V. SL. FOG)	(GUIDING) FINE
02:28E	+75 29	1-2"	6.84	F0	6-6-6	"	400/260	(SL. FOG)	FINE
01:45E	+77 44	"	6.66	A0	6-6-6	"	400/200	BLANK?	(GUIDING.) WEAK
02:42E	+43 13	"	6.36	A5	6-6-6	"	400/200		(GUIDING) WEAK
02:31E	+27 56	"	6.69	B5	6-6-6	"	400/200		(SL. GUIDING) FINE
02:22E	+13 15	2-3"	6.1	B8IV	6-6-6	"	400/200	(new box)	FINE
00 11E	+4 38	"	3.93	K2III	9-9	std vel	40/30		FINE
in in [illegible]					3/3	no filter			GOOD

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Date FRI-SAT MARCH 26/27 1971 **Observer** GL-TN / TM **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34228	HD44768	$06^h 18^m.5$	+15° 55'	G12	IIaD	13'.5	30°F	19:21	20:43	A	
~~34~~	~~HD69867~~	~~$07^h 43^m$~~	~~+71° 57'~~	"	"	"	~~30°F~~	~~20:56~~	~~22:26~~	~~C~~	
34229	HD86986	$09^h 57^m.0$	+15°04'	"	"	"	27°F	22:14	00:14	B	02 13W

Dome Temp. 25°F H=62%

Transparency Conditions Excellent

Focus .....

Dome Temp. 22°F H=65%

Cloud at 23h thick at 09

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00h 10m W	+15 55	1-2"	7.6	A0	6-6-6	GlAp+m	400/200		V.SL. WIK
~~0h 35m W~~	~~+71° 46'~~	~~2"~~	~~7.82~~	~~A0~~	~~6-6-6~~	"	~~400/200~~	forgot to uncap	
02 13 W	+14°43'	1-2	8.12	A1	6-6-6	"	400/160	cloud (cut short)	SL. WK
								Closed 01h	
								NO FOG !	

Date 2nd/3rd MAR 22/23 1911 **Observer** Lp/Jm/Pa **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
~~34230~~	U Mon	7h 26.0	-9° 31.1	G12	IIa O	13/1.3		19:25	19:47	A	
34230	HD 73262	8 31.4	-6 03	"	"	13/1.5	32°F	19:52	20 30	B	
34231	HD 74280	8 35.0	+3 45	"	"	13/1.5		20:35	21:01	A	
34232	HD 93702	10 44.0	+11 04	"	"	"		21:07	21:27	B	
34233	HD 87504	10 00.3	+2 55	"	"	"		21:31	21:51	A	
34234	HD 52191	6 9 25.9	+27 50	"	"	13/1.5	31°F	21:56	22:56	B	
34234F	Focus			"	"	13	"			B	
34230 71	calibration steps undone for plate 34228-34234								29 hrs	"	

Done Temp.
Focus
Done Temp.

Dome Temp. 28°F H=65%

Focus .....

Dome Temp. 27°C H=75%

Transparency Conditions thin clouds

Bolton Spectroscopic

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0h 00m W	-9° 39'		~8	G5	4-	K/Tau	100/—	Direct Time [illegible]	
0h 04 E	+5 51	2-3	2.14	B7	5-6-6	Sky - Spec. Bi.	200/100	thin cloud	(GUIDING,) FINE
0 20 W	+3 31	~3	4.10	B3	6-6-6	"	200/100	cloud	FINE
01 20 E	+10 42	1"	5.29	A2	6-6-6	"	400/200		UPSIDE DOWN
00 10 E	-12 54	2-3"	4.51	B8	6-6-6	"	200/100	(new box)	FINE
01 35 W	+27 33	2"	6.59	A0	6-6	Sp Bi-G2	400/86	Cirus cloud (approx time)	UPSIDE DOWN PLATE UPSIDE DOWN
	min/out				3/3	not Hot			
NGC 7/	9.0 mm ⊕	6th E/2	20 IR		O			NO FOG	

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Date TUES/WED MARCH 30/31 1971 **Observer** TM/GZ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
* 34235	CO Aur HD 40457	05 53·8	+35 19	G12	IIa-o	13/0·3	30°F	19:26	21:26	A
34236	HD 82191	09 25·4	+27 50	"	"	13/0·5	"	21:29	22:33	B
34237	HD 63630	07 44·8	+46 12	"	"	13/0·5	"	22:37	23:37	A
* 34238	HD 105898	12 06·2	+25 19	"	"	13/0·3	28°F	23:42	01:54	B
34239	HD 153720	16 56·0	+75 34	"	"	13/0·5	27°F	02:09	03:05	A
34240	HD 154528	17 00·9	+77 48	"	"	13/0·5	"	03:10	03:54	B
34241	HD 172181	18 33·7	+42 08	"	"	13/0·5	"	04:04	04:36	A
34242	HD 180316	19 11·0	+27 46	"	"	13/0·5	26°F	04:40	05:24	B
34242 F	Focus					13	25°F			B
34242 T1	calibration steps undge for plates			34236-7, 34239-34242					31 Mar 71	
* Anon please develop as requested by Dr. Head										

Dome Temp. 2
Focus
Dome Temp. 2

Hour Angle End

Dome Temp. 28°F H=62%

Focus .....

Dome Temp. 23°F H=75%

Transparency Conditions EXCELLENT

Aurora in far north 21h →

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03 41W	35 20	2-3"	7.8-8.6	F5	6-6-6	RV TAURI	800/200	dw. 15 min Slow : CUT SHORT	FOG WEAK
01:18W	+37 34	3-4"	6.59	A0	6-6-6	SPEC. BIN.	400/200		SL. FOG FINE
04:01W	+46 02	2-3"	6.53	A3	6-6-6	"	400/200	SEEING IMPROVING	FOG V. SL. WK
01:59W	+24 57	1-2"	8.19	G2V	3-6-6	S.S.V.	600/300	dw. 15 min.	FINE
01:35E	+75 25	"	6.84	F0	6-6-6	SPEC. BIN.	400/360		FINE
00:47E	+71 40	"	6.66	A0	6-6-6	"	400/200		FINE
01:44E	+43 11	"	6.26	A5	6-6-6	"	400/200		FINE
01:35E	+27 54	"	6.67	B5	6-6-6	"	400/125	Down — Cut short	(GUIDING) SL. WK
	in at 1st end				313	no filter			GOOD
TWO-2 / 9.0 min @ 68°F / 2 ADC					IKO				

Date FRI/SAT APRIL 2/3 1971 Observer GL-Tn/Kn-Tn Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34243	HD51418	$06^h 52.^m2$	+42° 26'	912	IIaO	9/.5	39°F	19:26	20:38	A	
34244	HD63887	$07^h 46.^m1$	+71° 57'	"	"	13/.3	38°F	20:44	21:56	B	
34245	HD82191	09 25.4	+27 50	"	"	13/.5	"	22:04	23:02	A	
34246	HD93702 (53600)	$10^h 44.^m0$	+11° 04'	"	"	13/.5	37°F	23:16	23:46	B	

Dome Temp. 65% H / 35° F

Focus .....

Dome Temp. 86% 33° F

Transparency Conditions Excellent

Start Cloud 22h

Thick " 23h

300

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1h 06m W	+42 23	2"	6.61	A0	6-6-6	G1 Apt + m	200/100		Fine
2h 28m W	+71 47	"	7.52	A0	6-6-6	"	400/123		Fine
2h 04 W	+27 32	"	6.59	A0	6-6-6	Sp. Bin-Gz	400/170	some cloud	Fine-guiding
1h 24m W	+10° 44'	2.3'	5.29	A2II	6-6-6	Sp. Bin-Blu	200 fine		Fine
								more cloud	

Date Sat-Sun April 3/4 /71 **Observer** Tom-Gal/Tom-Dinotth **Julian Day**

Dome Temp. 2
Focus
Dome Temp. 2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34247	HD 82191	09 25.4	+27 50	G12	IIaO	13/.5	32°F	19:30	20:46	A	00 14E
	Looked at M3 - very good										
34248	HD 153720	16 56.0	75 34	G12	IIaO	13/.5	27°F	02:35	4:43	B	4:20W
34249	HD 161868	17 [illegible]9	+2°45	"	"	"	"	05:10	5:18	A	0:02W
	Looked at plates - bad seeing.										
34250 T1	Calibrate step wedge for plates 34243 - 34250 April 4/71										1h+2

Dome Temp. 29°F H=67%

Focus

Dome Temp. 24°F H=72%

Transparency Conditions Scattered Cloud very bad seeing Clear again by 1:30

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00:14E	27 33	3"	6.59	AO	6-6-6	Sp Bin - G2	400/170	Cloud by 21h	s/weak
00:25W	75 27	3"	6.84	F0	6-6-6	Sp Bin - G2	400/240	very slow	Fine - guiding
00:02W	+2°45	2"-3"	3.79	AOV	10-10	Sp Bin - Bln	40/18		s/strong guiding
								All plates fogged time	
MWP-2	(9.0 min	@ 68°F	/ 240 & 160)						

Date Sun.-Mon. April 4/5 1971 Observer T-Gt Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34250	HD 82191	09 25.4	+27 50	G12	Tao	13/0.5	30°F	19:31	20:15	A	
34251	HD 63887	07 46.1	+71 57	"	"	13/0.3	"	20:21	21:25	B	
34252	HD 62630	07 44.8	+46 12	"	"	13/0.5	"	21:35	22:20	A	
34253	HD 101906	11 38.6	+24 33	"	"	13/0.3	29°F	22:27	23:57	B	
34254	HD 82191	09 25.4	+27 50	"	"	13/0.5	37°F	00:03	01:05	A	
34255	HD 153120	16 56.0	+75 34	"	"	13/0.5	26°F	01:12	01:48	B	

Dome Temp. 27°F H=65%

Focus .....

Dome Temp. 22°F H=72%

Transparency Conditions ...EXCELLENT.....

Thick cloud by 02^h

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00:41 E	+27 37	1-2"	6.59	A0	6-6-6	SPEC. BIN.	400/200		Fine sl guiding
02:05 W	+71 50	4	7.52	A0	6-6-6	"	400/120		Fine Fog
02:04 W	+46 05	"	6.53	A3	6-6-6	"	400/200		FINE sl Fog.
00:51 W	+24 13	"	8.24	~~A2~~	3-3 3-3-3-3	S.S.V.	800/300		FINE Fog.
04:10 W	+27 35	"	6.59	A0	6-6-6	SPEC. BIN.	400/200		SL GUIDING FINE
02:32 E	+75 28	"	6.94	F0	6-12	"	400/92	CUT SHORT; CLOUDS	Guiding SL WEAK

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Date Nov-Dec 5/6/71 **Observer** Ta-Pd-Pt **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34256	wy Gem	06 05.9	23 14	G12	IIaO	13/.3		19:42	20:17	A
34257	HD 52191	09 25.4	27 50	G12	"	13/.5		22:30	23:00	B
34258	HD105898	12 06.2	+25 19	G12	"	13/.3	29°	23:32	01:25	A
34259	142983	15 52.6	-13 59	G12	"	13/.5		01:41	02:05	B
34260	HD130149	14 41.2	+2 19	G12	"	"		02:22	02:29	A
34261	59 Her	17 51.4	26 04	"	"	"		02 40	03:18	B
34262	Antares	16	-26	"	"	"	28°F	03 32	03:38	A
34263	142983 (repeat)	15 52.6	-13 59	"	"	"		03 54	04:12	B
34264	29 Her	17 51.4	26 04	"	"	"		04 20	04 48	A
34265	HD 156729	17 14.2	+37 24	"	"	"		04:54	05:04	B
34265F	Focus			G12	IIaO	13	28°F			F
34265T1	Cal step wedge for plates 34251-55, 34261-65									

Dome Temp. 29°F H: 67%

Focus .....

Dome Temp. 26°F H: 77%

Transparency Conditions Excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04 45 W	23° 17'	1-2"	~8	M3 cpla	5-6-6	G1001-Prt	800/360		Sl weak
02 28 W	27° 35'	1"	6.6	A0	6-6-6	Spec. Bin/Sm	200/100		FINE
01:54 W	24 58	1"	8.19	G2V	3-3-3 3-3-3	S S V	800/300		* FINE
01 12 E	-14 06	4"	4.72	Bp	6-6-6	G1001-Prt	100/50		* FINE
00:22 W	+02 05	"	3.74	A0V	6-6-6	Bottom	40/18		* FINE
1 15 E	26 05	2"	5.5	F5p	6-6-6	G1001-Prt	200/130		* Sl FSG FINE
00:11 E	——	4"	.9	M1b	10-10	"	40/34		FINE
00:54 W	-14 07	3"	4.72	Bp	6-6-6	"	200/90		* FINE
00 28 E	+26 07	2"	5.5	F8p	6-6-6	G1001 Prt	200/130		FINE
00:25 W	+37 23	1-2'	4.79	A2V	10-10	Sp Bin-Blu	200/90		** Sl STRONG
In the focal					3/3	no filter			O.K.
								* fogged	
April 7/71								** spots of light - dove blue end	

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Date Tues-Wed April 6/7/71 Observer JHm-TA Julian Day

Dome Temp. 32
Focus
Dome Temp. 2

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34266	HD 76294	08 50.1	+6°20	612	IIaO	9/.5	38°F	19:40	19:48	A	00 23E
34267	HD 77247	08 56.3	+53 30	"	"	13/.3	37°F	20:00	21:18	B	0356W
34268	HD 101501	11 35.8	+34 46	"	"	9/.5	"	21:25	22:15	A	0044E
34269	HD 101013	11 32.5	+51 10	"	"	13/.5	36°F	22:24	23:58	B	0102W
34270	HD 106690	12 11.1	+41 13	"	"	"	34°F	00:05	01:27	A	0155W
34271	HD 137391	15 20.7	+37 41	"	"	"		01:42	01:52	B	0150E
34272	HD 137392	"	"	"	"	"	33°F	01:55	03:25	A	0144W
34273	HD 153882	16 57.0	+15 05	"	"	"	32°F	03:31	04:25	B	0307W
34274	HD 139195	15 31.7	+10 21	"	"	"	"	04:29	05:14	A	0220W
34274T1	calibration	slip wedge for plates			34256 - 34260, 34269 - 34274						
34274T2	"	" "	"	"	34266 - 34268						

Dome Temp. 32° H=70%

Focus .....

Dome Temp. 27°F H=63%

Transparency Conditions Excellent some haze

Ending Time EST	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
19 48	A	00 23E	06 07	2"	3.1	KOm	6-12	Late Type	40/32		FINE
21 18	A	0056W	53 17	1-2"	8.1	KOp	6-6-6	"	800/450	SL. FOG	FINE
22 15	A	0044E	34 26	1-3"	5.3	G8V	6-6-6	"	200/140		FINE
23 58	B	0102W	50 50	2"	6.0	Klp	6-6-6	"	200/175	FOG + DOTS	FINE
01 27	A	0155W	40 53	"	7.4	MOm	6-6-6	"	400/430	SL. FOG	FINE
02 12	A	0050E	37 32	"	4.65	FOV	10-10	Vis Fin	200/120		FINE
03 16	A	0044W	37 30	2-3"	7.11	dG0	6-6-6	"	400/260		FINE
04 21	A	0007W	15 02	3"	6.32	Ap	6-6-6	"	200/100		FINE
05 -	A	0220W	10 09	"	5.4	Klp	6-6-6	Late Type	200/140		FINE
		7 April 1971		M.W.P. 2	19.0 min		@ 68° F				
		"	"	"		"	"				

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Date WED/THUR APRIL 7/8 1971 **Observer** GE - RI **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
* 34275	U Hor	07 26.0	-09 34.1	G12	IIaO	13/0.3	38°F	19:30	20:40	A
34276	H.D. 82191	09 35.4	+27 50	"	"	13/0.5	"	20:45	21:21	B
34277	H.D. 63620	07 44.8	+46 12	"	"	13/0.5	"	21:24	21:55	A
34278	H.D. 91948	10 31.9	+60 38	"	"	13/0.5	37°F	22:00	23:04	E
34279	H.D. 153720	16 56.0	+75 34	"	"	13/0.5	35°F	23:13	00:29	H
34280	H.D. 82191	09 35.4	+27 50	"	"	13/0.5	34°F	00:36	01:40	B
34281	H.D. 154721	17 00.9	+77 48	"	"	13/0.5	32°F	01:49	02:29	A
34282	H.D. 172171	18 35.7	+43 03	"	"	13/0.5	32°F	02:49	03:27	E
34283	H.D. 186316	19 11.0	+27 46	"	"	13/0.5	"	03:32	04:36	H
34284	H.D. 186547	19 27.9	+13 04	"	"	13/0.5		04:42	05:15	B
34284F1	from 53	out = 2/-	-	-	-	?	30°F			B
34284T1	calibration star mags for plates 34276 - 34284									
* Develop + fix 2 Hardie plates										

Dome Temp. 23
Focus
Dome Temp. 2

Hour Angle End

Dome Temp. 33°F H=67%

Transparency Conditions EXCELLENT

Focus .....

Dome Temp. 24°F H=57%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01:57W	-09 37	1-2"	6.1-8.1	F8-K0	6-6-6	RV Tau	800/200	Run 15 min. CUT SHORT; VERY SLOW	weak
00:37W	+27 35	~1"	6.59	A0	6-6-6	SPEC. BIN.	400/200		FINE
02:51W	+46 05	1-2"	6.53	A3	6-6-6	"	400/200		FINE
01:13W	+60 20	"	7.37	F8	6-6-6	"	400/260		FINE
03:39E	+75° 28	"	6.84	F0	6-6-6	"	400/260		Fog FINE
04:56W	+27 36	3	6.59	A0	6-6-6	"	400/200		Sl Fog FINE
01:52E	+78° 43	1-2"	6.66	A0	6-6-6	"	400/200		Sl. Fog Sl. Guiding FINE
02:23E	+43° 13	2	6.26	A5	6-6-6	"	400/200		Sl. Fog Sl. Guiding Sl. weak
01:50E	+27 57	2-3"	6.69	B5	6-6-6	"	400/200	BINARY! VERY SLOW: ECLIPSING	Sl. FOG Sl. Guiding Sl. WEAK
01:42E	+13° 15	"	6.1	B8II	6-6-6	"	400/180		Sl. FOG Sl. Guiding FINE
					3-3	+ filter			Ok
	8 April 1971	9 mm @ 68°F							
	EXPOSURE METRE STOPS FUNCTIONING SOMETIMES.								
	WILL WORK AGAIN IF SWITCHED OFF AND ON.								

Date THUR/FRID APRIL 8/9 1971 Observer Gt-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34285	H.D. 91948	10 31.9	+60 38	G12	IIaO	13/0.5	38°F	00:24 (100)	02:04	A	4:50
	H.D. 153720	16 56.0	+75 34	"	"	13/0.5		02:10		B	—

Dome Temp. 3
Focus
Dome Temp. 3

Dome Temp. 30°F H=58%

Transparency Conditions VERY HAZY

Focus

Dome Temp. 30°F H=64%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04:18W	+60 20	1-2"	7.37	F8	6-6-6	SPEC. BIN	400/200	CUT SHORT; TEL. TOUCHES N. PER. SI WEAK	
~~—~~	~~+75° 29'~~	~~4-5"~~	~~6.84~~	~~F0~~	~~6~~	~~—~~	~~400~~	~~—~~	
		CLOSED UP AT				2h:30; SEEING		VERY POOR (5-10") AND SKY VERY HAZY	

Date Sat/Sun April 10/11 1971 Observer Blu-R. Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34286	HD53755	7h01.1	-10° 30'	G-12	IIa-O	13/.3	37°F	19:33	20:27	A	
34287	HD71663	8h23m.4	-2° 11'	"		"		20:30	21:39	B	
34288	HD77309	8h53m.7	+5° 41'	"	"	13/.5		21:44	22:15	A	
34289	HD79469	9h09.3	+02° 44'	"	"	"		22:18	22:27	B	
34290	HD87504	-10h00m.5	-12° 35'	"	"	"		22:30	22:52	A	
34291	HD93702	10h44m00s	+11° 04'	"	"	"		22:57	23:24	B	
34292	HD103483	11h49m54s	+47° 02'	"	"	13/.3		23:31	00:26	A	
34293	HD107325	12h15m.3	+27° 11'	"	"	"		00:31	01:19	B	
34294	HD110411	12h36m49s	+10° 47'	"	"	13/.5		01:22	01:44	A	
34295	HD124675	14h09m54s	+52° 15'	"	"	13/.5		01:53	02:07	B	
34296	HD130109	14h41m12s	+02° 19'	"	"	"		02:11	02:19	A	
34297	HD130841	14h45m21s	-15° 38'	"	"	"		02:22	02:26	B	
34298	HD124897	14h11m06s	+19° 42'	"	"	"		02:30	02:32	A	
34299	HD152614	16h49m17s	+10° 20'	"	"	"		02:36	02:46	B	
34300	HD159026	17h27m30s	+38° 57'	"	"	13/.3		02:51	03:40	A	
34301	HD164577	17h36m41s	+01° 18'	"	"	13/.5		03:44	03:56	B	

Dome Temp. 32°F H=57% **Transparency Conditions** Some Haze low in west

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02h20mW	-10° 32	3"	6.43	B0 V?	6-6-6	Sp. Bin-Bln	400/120	Lots of cirrus moving in	SL WEAK
02h09mW	-02° 20	2"	6.72	dF0	6-6-6	"	400/150		FINE
02h00mW	+54 28'		5.64	A2n	6-6-6	"	200/200		SL GUIDING FINE
01h50mW	+020 30'	2-3	3.88	B9.5 V	6-6-6	"	40/18		FINE
01h46mW	-120 53	2-3	4.51	B8 V	6-6-6	"	40/20		FINE
01h34mW	+100 47'	2	5.29	A2 V	6-6-6	"	200/100		SL GUIDING FINE
01 35W	+46° 42	1-2	6.46	A0	6-6-6	"	400/120		SL WEAK
01h58mW	+26° 50	1-2	V= 4.97	gK2	6-6-6	"	400/192		FINE
02h06mW	+10° 27'	2	4.88	A1 V	6-6-6	"	40/20	1/2" pure moisture	FINE
00h52mW	-51°58	1-2	4.54	A7 IV	6-6-6	"	80/44		FINE
00h32mW	+02° 05	2	3.74	A0 V	6-6-6	"	40/20		FINE
00h35mW	-14° 08'	2-3	2.89	Am	6-6-6	"	40/20		FINE
01h15mW	+190 24	2	1.36	F2 III p	9-9	"	40/32		FINE
01h07mE	+10° 15	2	4.30	B8 V	6-6-6	"	40/20		FINE
20h52mE	+38° 57	1-2	6.35	F2n	6-6-6		400/150		FINE
01h06mE	+01° 39	1-2	4.16	K1 V	6-6-6		80/40		FINE

(2)
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Date Sat/Sun April 10/11 1971 GMT **Observer** Bln - Ri **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34302	HD 167965	18h12m32s	+42° 08'	G.2	IIa O	13/.5		04:00	04:21	A	
34303	HD 170073	18h22m27s	+ 58°45	"	"	"		04:27	04:38	B	
34304	HD 177178	18h58m29s	+01° 40'	"	"	"		04:45	05:02	A	
34304F1	focus test	on wt/wire	"	"	"	9	320F			B	
34304T1	calibration	steps used	for	plate	34285 - 34295						
34304T2	"	" "	"	"	34296 - 34304						

Dome Temp. 28°F 69%

Transparency Conditions hazy

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00h55E	+42012		5.51	B6V	6-6-6	Sp-B1a-B1a	2m/1m		FINE
00h46E	+58°48'		4.93	A1V	6-6-6	"	80/40		FINE
01h00E	+01°50		5.68	A2	6-12		200/38	No Good - must have been in p.h. and shut by clouds upside down.	← RIGHT
					3-3 no filt				C. To RED
MWP 2 @ 68°F 9mm 11 April 71									
" " " " " "									

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Date Sun/Mon April 11/12 1971 **Observer** Bln-R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34305	HD 71663	$8^h 23^m.4$	$-2° 11'$	G-12	IIa-O	13/1.3	50°F	19:35	21:12	B
34306	HD 93702	$10^h 44^m.0$	$+11° 04'$	"	"	"		19:16	21:38	A
34307	HD 77309	$08^h 56^m.7$	$+54° 41'$	"	"	13/1.5		21:43	22:09	B
34308	HD 103483	$11^h 49^m 54^s$	$+47° 02'$	"	"	13/1.3		22:14	22:54	A
34309	HD 107325	$12^h 15^m.3$	$+27° 11'$	"	"	13/1.3		22:58	00:22	B
34310	HD 124675	$14^h 09^m.9$	$+52° 15'$	"	"	13/1.5		01:22	01:40	A
34311	HD 110411	$12^h 36^m.8$	$+10\ 47$	"	"	"		01:44	02:05	B
34312	HD 124897	$14^h 11^m 06^s$	$+19° 42$	"	"	"		02:07	02:08	A
34313	HD 130109	$14\ 41.2$	$+2\ 19$	"	"	"		02:12	02:19	B
34314	HD 159026	$17^h 29^m 2^s$	$+38° 57$	"	"	13/1.3		02:24	03:24	A
34315	HD 164284	$17^h 55^m 19^s$	$+04° 22'$	"	"	13/1.5		03:28	03:49	B
34315 F1	focus test	00 00/4 min				9	42°F			B
34315 T1	calibration step wedge for plates 34305 - 34315									

Dome Temp. 44°
Floor
Dome Temp. 36

Hour Angle End

Dome Temp. 44°F H=53%

Focus .....

Dome Temp. 36° H=62%

Transparency Conditions Scattered Cirrostratus + Haze

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01h46w	-2°23'	3-4	6.72	dF0	6-6-6	Sp-Bin-Bln	400/156	Clouds - Clouds Gone 21:00	SL. WEAK
00h09E	+10°46	3	5.29	A2V	6-6-6	"	200/60		FINE
02h09W	+54° 27	2	5.64	A2n	6-6-6	"	200/100		SL WEAK SL GUIDING
00h02W	+46° 41	2	6.46	A0	6-6-6	"	400/120		FINE
01h05W	+26°51'	2	V= 5.47	gK2	6-6-6	"	~~400~~/320	Patchy Clouds 23:10 Cut short - cloud bank!	FINE
00h30W	+51° 58'	1-2	4.74	AIV	6-6-6	"	80/44	clear up about 01:30	FINE
02h25W	+10°27'	3	4.97	A1V	6-6-6	"	40/20		FINE
00h56W	+19°25'	1-2	1.30	KIIIp	9-9	RV-Std	40/32		FINE
00h35W	+02°03'	1	3.74	A0V	6-6-6	Sp Bw-Bln	40/20		FINE
01h05E	+38' 57	1	6.35	F2n	6-6-6	"	400/156		FINE
01h06E	+04°25'	1-2	4.79	B2Ve	6-6-6	"	200/63	Clouds	SL WEAK
					3-3	no filter			C TO RED
12 April 1971 MWP 2 @ 68°F									

Date Tue Wed 13/14 1971 **Observer** Ri **Julian Day**

Done Temp. 3
Focus
Done Temp. 3

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34316	HD 153720	16 56.0	+75° 34	G12	IIaO	13/.5	350	02:31	03:10	17	04:35E
34317	HD 148857	16"25^9	+02°12'	G12	IIaO	13/.5		03:15	03:32	B	04:04W
34318	HD 156729	17"14·2	+37° 24	"	"	"		03:38	03:55	A	04:15E
34319	HD 167965	18 12.5	+42° 08'	"	"	"		03:59	04:32	B	04:32E
34320	HD 161868	17 42 9	+02 45	"	"	"		04:37	04:50	A	03:12W
34320 FI	focus test	out 3rd/in in		"	"	9				B	

Dome Temp. 32°F 65%

Focus .....

Dome Temp. 30°F 63%

Transparency Conditions ..... good but bad seeing

what happen to the door to the catwalk
It went to be shortened (at the bottom)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00435E	+75°30	4	6.84	F0	6-12	SPEC BIN	400/60	too slow at short	weak
00408W	+02°05	4	3.86	A1V	6-6-6	SPEC BIN	80/40		Fine
00413E	+37°23	"	4.79	A2V	6-6-6	"	80/40		Fine
00434E	+42013	"	5.51	B6V	6-6-6	"	200/100		Fine
00414W	+02°45	"	3.79	A0V	6-6-6	"	80/40		Fine
					3-3 no filter				

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Date WED/THUR APRIL 14/15 1971 **Observer** GE/TM **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34321	H.D. 82191	09 25.4	+27 50	G12	IIaF	13/0.5	35°F	19:37	20:37	A
34322	HD 63630	07 44.8	+46 01	"	"	13/0.5	"	20:41	21:41	B
34323	HD 153720	16 56.0	+75 24	"	"	13/0.5	"	21:48	23:28	A
34324	HD 82191	09 25.4	+27 50	"	"	13/0.5	34°F	23:35	00:51	B
34325	HD 154528	17 00.9	+17 48	"	"	13/0.5	32°F	01:00	02:26	A
34325 T1	Calibration step wedge for plates 34316 - 34325, April 14/71									

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. 31°F H=55%

Transparency Conditions EXCELLENT

Focus

Dome Temp. 28°F H=63%

Fantastic Aurora from 20h – 2h

Cloud by 02h

Reading Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		00:20 W	+27 35	1-2"	6.59	A0	6-6-6	SPEC. BIN.	400/220		Fine
		02:05 W	+46 05	"	6.53	A3	6-6-6	"	400/220		*Fine
		04:13 E	+75 28	"	6.84	F0	6-6-6	"	400/250		†Fine
		04:35 W	+27 35	2-3"	6.59	A0	6-6-6	"	400/200		‡Fine
		01:18 E	+77 43	"	6.66	A0	6-6-6	"	400/165	HEAVY HAZE; CUT SHORT	Weak guiding
		MWP-2 for 10 min @ 67°F								*Some fog	

Date THUR/FRID APRIL 15/16 1971 Observer GJ/Tm Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
34326	HD 82191	09 25.4	+27 50	G12	IIaO	13/0.5	42°F	19:40	20:22	A
34327	HD 63630	07 44.8	+46 12	"	"	13/0.5	"	20:27	21:25	E
34328	HD 153720	16 56.0	+75 34	"	"	13/0.5	"	21:38	23:20	A
34329	HD 82191	09 25.4	+27 50	"	"	13/0.5	"	23:26	00:36	E
34330	HD 154528	17 00.9	+77 48	"	"	13/0.5	40°F	00:49	01:44	A
34331	HD 172187	18 33.7	+43 08	"	"	13/0.5	39°F	01:51	02:37	E
34332	HD 153720	16 56.0	+75 34	"	"	13/0.5	"	02:48	04:1[illegible]	A
34333	HD 186547	19 39.9	+13 04	"	"	13/0.5	"	04:26	04:54	E

Dome Temp. 37°F H=57%

Focus .....

Dome Temp. 32°F H=60%

Transparency Conditions ....HEAVY HAZE.....
EXCELLENT BY 21h
MORE HAZE BY 22:30
EXCELLENT BY 00h

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00:09W	+27 35	~1"	6.59	A0	6-6-6	SPEC. 13IN.	400/220		FINE
02:52W	+46 04	1-2"	6.53	A3	6-6-6	"	400/220		SEEING FINE
04 16E	+75 28	"	6.84	F0	6-6-6	"	400/260		FINE
04:24W	+27 35	2-4"	6.57	A0	6-6-6	"	400/200		FINE
01:56E	+77 42	2-3"	6.66	A0	6-6-6	"	400/220		FINE
02:40E	+43 12	1-2"	6.26	A5	6-6-6	"	400/220		FINE
00:42W	+75 27	1-3"	6.84	F0	6-6-6	"	400/260		FINE
01:30E	+13 15	4-5"	6.1	B8IV	6-12	"	400/15	POOR SEEING-STRONG WIND DAWN: CUT SHORT	SL. WK

Date FRI/SAT APRIL 16/17 1971 **Observer** G1-Tn-Pn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34334	HD 51418	$06^h 52.^m 2$	+42° 26'	G12	IIa-O	9/15		19:45	21:05	A
34335	HD 88476	$10^h 07.^m 1$	+28° 44'	"	"	13/3	46°F	21:26	22:34	B
34336	HD 101706	$11^h 36.^m 6$	+24° 33'	"	"	"	"	22:39	00:41	A
34337	HD 110411	12 36.8	+10 47	"	"	13/1.5	45°F	01:00	01:28	B
34338	HD 130109	14 41.2	+ 2° 19'	"	"	"		01:42	01:48	A
34339	HD 130841	14 45.4	−15 38	"	"	"	44°F	02:01	02:06	B
34340	89 Her	17 54.2	+26 04	"	"	"		02:20	02:50	A
34341	HD 169189	18 18.3	+14 57	"	"	"		03:10	04:44	B
34341 T1	Calibration	step wedge	for plates	34334-34341 &	34325-28					

Dome Temp. 53% - 40°F

Transparency Conditions Excellent

Focus .....

Dome Temp. 35°F - 80%

From now on watch your step going out on the catwalk

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		02h 29m W	+42° 25'	2"	6.61	A0	6-6-6	G1 Aptm	400/200		FINE
		01 44 W	+28 27	1"-2"	8.14?	G8 III	3-3-3 3-3-3	S S V	800/350	very fast? f/d drawn	V. SL. WK
		02 22 W	+24 13	1"-3"	8.24	G2 II	3-3-3 3-3-3	"	800/300	Desk light off	SL. WK
		02 09 W	+10 28	2"-3"	4.97	A1 V	6-6-6	Sp Bin-Bln	40/20		(GUIDING) FINE
		00 26 W	+02 04	2"	3.74	A0 V	6-6-6	"	40/18		FINE
		0038 W	-15 51	2"	2.89	Am	6-6-6	"	40/18		FINE
		01 45 E ~~00 15 E~~	+26 07	3"	5.48	F5p	6-6-6	G1001-A+	200/130		FINE
		0015 E	+15 03	2"-3"	7.90	A2	6-	G1 Apem	400/100	Some cloud cut short Down early today	WEAK
		April	18/21	MWP-2		for	9 min	@ 68°F		(EXPOSED THROUGH GLASS)	

Date Sat/Sun Apr. 17/18 '71 Observer Bln-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34342	HD 107325	$12^h 15^m.3$	+27° 11′	6-12	IIa-O	13/3		22:33	23:09	B	[illegible]
34343	HD 124675	14 09.9	+52 15	"	"	13/5		23:16	23:30	A	[illegible]
34344	HD 141513	15 44.4	-3 07	"	"	"		02:30	02:36	B	[illegible]
34345	HD 148857	16 35.9	-2 02	"	"	"	41°F	02:41	02:45	A	[illegible]
34346	HD 152614	16 49.3	+10 20	"	"	"	"	02:50	02:58	B	[illegible]
34347	HD 159026	17 27.3	+38 57	"	"	"		03:02	04:06	A	[illegible]
34348	HD 161868	17 42.9	+2 45	"	"	"		04:10	04:16	B	[illegible]
34349	HD 167965	18 12.5	42 08	"	"	"		04:21	04:35	A	[illegible]

Dome Temp. 36° H=59%

Focus .....

Dome Temp. 35° H=64%

Transparency Conditions 60% Cloud cover

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
23:09		00'16W	+26° 52'	1-2	V= 5.47	gK2	6-6-6	Spt. Bin	400/172		FINE
3:10		01 17 E ~~01:17 W~~	+51 59	1-2	4.74	A7IV	6-6-6	"	200/61	Cut short heavy cloud	WEAK
42:36		00:14W	- 3 16	2"	3.53	A0V	6-6-6	"	100/45		FINE
12		00:17E	+ 2 07	2-3	3.86	A1V	6-6-6	"	40/14		FINE
42:58		00:29E	" "	2"	4.30	B8V	6-6-6	"	40/18		FINE
		00 01W	+38 56	2	V:6.35	F2n	6-6-6	"	400/260		FINE
		00 05E	+2 47	2	3.79	A0V	6-6-6	"	40/18		FINE
		00 15E	+42 12	2-4"	5.51	B6V	6-6-6	"	200/50	Cloud at Down	WEAK

Date Sun/Mon April 18/19, 1971 Observer Bln - Jn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34350	HD 71663	8h 23m.4	-2° 11'	G-12	IIa-O	13/.5		19:50	21:26	A	.27W
34351	HD 93702	10 44.0	+11 04	"	"	"	50°F	21:29	21:57		.38W
34352	HD 77309	8 56.7	+54 41	"	"	"	49°F	22:03	22:35	A	.03W
34353	HD 103483	11 49.9	+47 02	"	"	"		22:40	23 48	B	.23W
34354	HD 107325	12 15.3	-27 11	"	"	13/.3		23:51	00:33	A	.43W
34355	HD 110411	12 36.8	+10 47	"	"	13/.5		00:35	00:49	B	.38W
34356	HD 124897	14 11.1	+19 42	"	"	"	46	00:52	00:53		.07W
34357	HD 130109	14 41.2	+219	"	"	"		01:00	01:06		.10E
34358	HD 107325	12 15.3	+27 11	"	"	13/.3	45°	01:09	01:47	A	.25W
34359	HD 124675	14 09.9	+52 15	"	"	13/.5		01:50	01:58		.05W
34360	HD 170073	18 22.5	+59 45	"	"	"		02:04	02:18	A	.23E
34361	HD 167965	18 12.5	42 08	"	"	"		02:21	02:41		.12E
34362	HD 159026	17 27.3	+38 57	"	"	"		02:45	03:43	A	.17E
34363	HD 177178	18 58.5	+1 40	"	"	"		03:46	04:26		.11E
34364	HD 164577	17 56.7	+1 18	"	"	"		04:28	04:36	A	.11W
34364A	Moon						47°				

Dome Temp. 45°F H=69%

Focus .....

Dome Temp. 40°F H=70%

Transparency Conditions High Cirrus Clouds Over entire sky Excellent for most part

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 27W	-2° 20'	2	6.72	dF0	6-6-6	Sp. Bin	400/260		FINE
00 38W	+10° 46'	"	5.29	A2V	6-6-6	"	200/100		FINE
03 00W	+54 27'	2-3	5.64	A2n	6-6-6	"	200/100	link broken off	FINE
01 23W	+46 40	3-4	6.46	A0	6-6-6	"	400/200		FINE
01 43W	+26 52	2-3	V= 5.47	gK2	6-6-6	"	400/192		SC. WK
01 38W	+10 28	2-3	4.97	A1V	6-6-6	"	40/20		FINE
00 07W	+19 24	2-3	1.30	K2IIIp	10-10	IEV Std	40/29	Plate Holder Back loose before placed in spectrograph	FINE
00 10E	+02 03	2"	3.74	A0V	6-6-6	Sp. Bin	40/18		FINE
02 57W	+26 52	2	V= 5.47	gK2	6-6-6	"	400/190		FINE
01 15W	+51 59	"	4.74	A7III	6-6-6	"	40/19		
02 37E	+58 49	"	4.93	A1V	6-6-6	"	40/18		FINE
02 05E	+42 10	2	5.51	B6V	6-6-6	"	200/100		
~~00 20W~~ 00 17E	+38 55	"	V= 6.35	F2n	6-6-6	"	400/260		FINE
01 06E	+01 50	3-4	5.68	A2	6-6-6	"	200/100		FINE
00 06W	+01 22	"	4.46	A1V	10-10	"	40/18		FINE
					3/3	no filter			NO CENTERS

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Date MON/TUES APRIL 19/20 1971 **Observer** GE/TM **Julian Day**

Dome Temp. 4
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
	~~H.D. 22191~~	~~09 25·4~~	~~+27 50~~	~~G12~~	~~IIaO~~	~~13/5~~		~~22:55~~		A	
34364 T1	for later	34 329 -	31, 34342 - 49								9 04
T2		34332, 33	, 36, 50, 51, 52-55, 57-59								
T3		34352, 3436 - 64									

Dome Temp. 45°F H=62%

Focus .....

Dome Temp. .....

Transparency Conditions Clear by 23h not quite

Ending Time EST P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	—	+27 36	1.2"	6.59	A0	6-	Sp Bin GZ	400/38		
	19 Aft 17.	Mcwr. 2/	9.0	min@65°F	1/2 sec	1.40				

#1

333

Date THUR/FRI 22/23 APRIL '71 **Observer** Bln-Tk **Julian Day**

Dome Temp. 4

Focus

Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34365	HD 51418	06h 52m.2	+42° 2'	G-12	IIa-O	9/1.5	45°F	19:56	20:56	A	17.47W
34366	HD 107325	12 15,3	+27 11	"	"	13/1.3		21:00	21:24	B	RIDGE
34367	HD 103479	11 49.7	+47 02	"	"	13/1.5		21:28	22:06	A	
34368	HD 107325	12 15,3	+27 11	"	"	13/1.3	44	22:10	22:34	B	1.1W
34369	HD 110411	12 36,8	+10 47	"	"	13/1.5	"	22:37	22:45	A	0.10E
	HD 93702	10 44.0	+11 04	"	"	"		22:48	23:04	B	2.0W
34370	HD 107325	12 15.3	+27 11	"	"	13/1.3	42°F	23:08	00:02	A	1.3W
34371	HD 107325	12 15,3	+27 11	"	"	"	"	00:04	00:28	B	1.5W
34372	HD 124897	14 11,1	+19 42	"	"	13/1.5		00:31	00:32	A	
34373	HD 130159	41.2	+2 19	"	"	"		00:35	00:39	B	0.2E
34374	HD 130241	45.4	-15 38	"	"	"		00:42	00:49	A	0.9E
34375	HD 141458	15 44,1	+13 01	"	"	"		00:49	01:37	B	1.25E
34376	HD 107325	12 15,3	+27 11	"	"	13/1.3	40°F	01:41	02:09	A	1.2W
34377	HD 124675	14 09.9	+52 15	"	"	13/1.5		02:14	02:20	B	1.9W
34378	HD 170073	18 22,5	+59 45	"	"	"		02:25	02:31	A	0.55E
34379	HD 15[illegible]6	17 27.3	+38 57	"	"	"		02:37	03:13	B	1.03E

Dome Temp. 40°F H=58% Transparency Conditions Excellent - Windy

Focus .....

Dome Temp. .....

April 21/71 Secondary aluminized

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0343W	42°28'	2"	6.61	A0	6-6-6	G1 Ap+m	400/200		(CLOUDING) FINE
0110E	26 53	"	V=11 5.47	gK2	6-6-6	Sp. Bin	400/200		FINE
0303W	46 44	3	6.46	A0	6-6-6	"	400/200		(CLOUDING) FINE
0000	26 53	2-3'	V=5.47	gK2	6-6-6	"	400/200		FINE
0010E	+10 29	3-4	4.97	A1V	6-6-6	"	40/18		FINE
0200W	+10 48	"	5.29	A2V	6-6-6	"	200/100	broken - Discarded	
0130W	+26 54	2"	V= 5.47	gK2	6-6-6	"	200/250	Long exposure for K2 + m (v.sl fog)	STRONG
0155W	"	"	"	"	6-6-6	"	200/100		FINE
0004E	+19 25	"	1.30	K2IIIp	10-10	RV Std.	40/18		STRONG
0020E	+2°05'	2-3	3.74	A0V	10-10	Sp Bin	40/19		SL STR
0019E	-15 51	4	2.89	Am	10-10	"	40/18		SL. STR
0025E	+12 55	2-3"	6.80	A0	6-6-6	"	400/200	(sl fog)	FINE
0336W	+26 53	3	V= 5.47	gK2	6-6-6	"	400/200	(v sl fog	FINE
0154W	+52 01	2	4.74	A7IV	10-10	"	200/90		SL STR FINE -
0206E	+58 51	2	4.92	A1V	10-6-3	"	40/19		FINE
0031E	+38 52	2	V= 6.31	F2n	6-6-6	"	200/260		FINE

#2

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Date 22/23 April 71 **Observer** Rla - Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34380	HD 187459 ~~187461~~	19 45,0	+33 11	6-12	IIa-O	13/15		03:18	03:46	A
34381	HD 187965	18 12,5	+42 06	"	"	"		03:50	04:05	B
34382	HD177178	18 58,5	+1 40	"	"	"		04:05	04:29	A
34383	HD 164627	17 56,7	+1 18	"	"	"		04:32	04:38	B
34363F	Focus			"	"	13	39°F			F
34383 T1	34 365 - 34375									
T2	34676 - 34383									

Dome Temp.
Focus
Dome Temp. 39

Hour Angle End

Dome Temp. ..... Transparency Conditions ..... Excellent .....

Focus .....

Dome Temp. 35°F H=65%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 15E	+33 26	2	6.66	B0.5V	6-6-6	Sp. Bin	400/200		FINE
00 28E	+42 14	2"-3"	5.71	A2V	6-6-6	"	200/100	s/l fog	FINE
00 46E	+02 51	"	5.68	A2	6-6-6	"	200/100		FINE
00 24W	+01 23	3-4	4.46	A1V	10-10	"	40/19		FINE
	in in out out				3/3	no filter			SL. CENTRS TO RED
MWP. 2/9.0 min @ 65°F/ 270 CIRC									

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Date 23/24 April '71 Fri./Sat **Observer** Bl - Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34384	HD93702	10 49.0	+11 04	6-12	IIa-O	13/.5	49°F	19:50	20:06	A
34385	HD79469	09 09.2	+2 44	"	"	"		20:09	20:13	B
34386	HD79362	08 32.4	+6 03	"	"	"		20:16	20:20	A
34387	HD79280	08 24.0	+3 45	"	"	"		20:23	20:29	
34388	HD97504	11 00.3	-12 35	"	"	"		20:32	20:41	A
34389	HD103123	11 49.9	+47 02	"	"	"	48°F	20:47	22:24	B
Blank plate from unexp box may be fogged — test plate OK										
34384 "	calibration for plate		= 34384 -	34389					26 Apr	

Dome Temp. 41°F H=53%

Focus .....

Dome Temp. .....

Transparency Conditions Bad - Many Clouds
Some holes

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0054E	+10 49	1-2	5.29	A2V	6-6-6	Sp. Bin	200/100		FINE
0048W	+2 34	2	3.82	B9.5V	10-10	"	40/19		FINE
0133W	+5 56	"	4.14	A0V	10-10	"	40/19		FINE
0135W	+3 35	1½"	4.10	B3V	10-10	"	40/	[illegible]	FINE
0026W	-12 48	2-3	4.51	B2V	6-6-6	"	200/94	Clouds	FINE
0019W	-16 39	1-2	6.46	A0	6-6-6	"	400/180	THICK CLOUDS 20:[illegible] Clear 10:30	[illegible] SCUM
NWP-2	9.0 min	@ 64° F		12 Dec 1980					

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Date MON/TUES APRIL 26/27 1971 **Observer** Gt/Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34390	HD 153720	16 56.0	+75 34	G12	IIa-O	13/0.5	43°F	23:46	01:16	A
34391	HD 154528	17 00.9	+77 48	"	"	13/0.5	42°F	01:34	02:30	5
34392	HD 173181	18 35.7	+43 08	"	"	13/0.5	41°F	02:38	03:10	A
34393	HD 166842	18 07.4	+25 32	"	"	13/0.3	"	03:15	04:20	3
34393?.	calibration	slit	wedge for plates	34390 -	34391				27 Apr	

Dome Temp. 38°F H=75%

Transparency Conditions GOOD, SOME HAZE B.Y. 23:30

Focus

Dome Temp. 37°F H=82%

Dec slew not working (motor pin replaced by smaller pin)

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	01:38 E	+75 30	2-3"	6.84	F0	6-6-6	SPEC BIN.	400/260		FINE
		00.37 E	+71 46	"	6.66	A0	6-6-6	"	400/220		
		01:25 E	+43 15	2"	6.26	A5	6-6-6	"	400/220		Fine
		20:11 W	+25 39	1-2"	8.14	KIII	6-3-3-3	S.S.V.	700/300	SEEING BETTER	
										DOUBLE EXPOSURE	

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Date Fri/Sat April 30/1 Observer D/Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34394	HD 82191	09 25.4	+27° 50	G-12	IIaO	13/.5	50°F	20 29	21:14	A
34395	HD 88476	10 07.1	+28 44	"	"	13/.3	"	22 25	23 41	B
34396	HD 101906	11 38.6	+24 33	"	"	"	48°F	23 49	01 41	A
34397	AC HER	18 26.0	+21° 48	"	"	"		01 55	03 20	B
34398	R SCT	18 42.1	−05 49	"	"	"	"	03 30	03:48	A
34399	HD 167965	18 12 5	+42° 08	"	"	13/.5		03:55	04 08	B
34400	HD 191610	20 05.7	+36 33			"		04:12	04 20	A
34400 F1	focus test	at end/		G-12	IIaO	9	44°F			B
34400 +1	calibration	step wedge for plates 34394-34400							3 hrs	11

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 43°F 60%

Focus .....

Dome Temp. 40°F 77%

Transparency Conditions clouds at beginning of night excellent after 22 20

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2h 00m W	+27° 40'	2	6.59	A0	6-6-6	SPEC. BIN.	400/220	clouds between 21:14-22:15	(GUIDING) FINE
3h 47m W	+28° 25'	2	8.14	G8	3-3-3 3-3-3	See STD VEL	800/300		SL. WK
4h 16m W	+24° 13'	2	7.24	G2	3-3-3 3-3-3	"	800/300		SL WK
0h 52m E	+21 52	2	~8.5	~G5	3-3-3 3-3-3	RV TAU	800/320		SL. WK
0h 40m E	-05° 43'		~7.5	~G5	3-3-3 3-3-3	"	400/320		SL. WK
0h 09m W	+42° 12		5.51	B6 II	6-6-6	SPEC BIN.	200/100		(GUIDING) SL. STRONG
01h 30m E	+36° 47		4.82	B3 Ve	6-6-6	"	20/10		SL. STR
					3-3	no filter			C TO R
Hilger 21	9.0 mm @	68°	=	1/270	CIKO				

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Date May 3-4 1971 Observer B.L./R.I. Julian Day

Dome Temp. 50
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34400	HD 77309	08h 56.7	+54° 41'	G-12	IIa-O	13/.5	47°F	20:27	20:40	A	
34401	HD93702	10 44.0	+11 04	G-12	IIa-O	13/.5		22:11	22:33	A	
34402	HD107325	12 15.3	+27 11	"	"	13/.3		22 37	23:06	B	
34403	HD110411	12 36.8	+10 47	"	"	3/.5		23:10	23:21	A	
34404	HD103483	11 49.9	+47 02	"	"	"		23:26	00:05	B	
34405	HD124675	14 09.9	+52 15	"	"	"		00:09	00:16	A	
34406	HD130841	14 45.4	-15° 38	"	"	"		00:21	00:24	B	
34407	HD141458	15 44.1	+13° 01	"	"	"		00:29	00:09	A	
34408	HD 124897	14 11.7	+19 42	"	"	"		01:12	01:13	B	
34409	HD 130109	14 41.2	+2 19	"	"	"		01:17	01:21	A	
34410	HD152614	16 49.3	+10 20	"	"	"		01:24	01:29	B	
34411	HD159026	17 27.3	+38 57	"	"	"		01:33	02:29	A	
34412	HD167965	18 12.5	+42 08	"	"	"		02:32	02:47	B	
34413	HD178073	18 22.5	+58° 45	"	"	"		02:52	03:00	A	
34414	HD187459	19 45.0	+32 11	"	"	"		03:05	03:39	B	
34415	HD164577	17 56.7	+01° 18'	"	"	"		03:43	03:51	A	

Dome Temp. 40°F 57%

Focus .....

Dome Temp. .....

Transparency Conditions Many Clouds - Very Bad
good after 22.30

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
			+54° 26'	4	5.64	A2 n	6-	Sp. Bin - Bln	200/	Capped 20:40 Clouds	
	A	2H 14W	+10° 47'	3-4	5.29	A2 V	6-6-6	Sp. Bin - Bln	200/100		FINE
		1H 15W	+26° 50	2-3	V= 5.47	gK2	6-6-6	"	100/200		FINE
		1H 10W	+10° 28	2-3	4.57	A IV	6-6-6	"	40/18		FINE
		2H 40W	+46° 42	2-3	6.96	A0	6-6-6	"	400/200		O.K.
		0H 32W	+51° 59'	2	4.74	A7 IV	6-6-6	"	40/19		FINE
		04 03W	-15° 51	3	2.89	Am	10-10	"	40/18	moved fit in eyepiece bar so put in diagonally	FINE
		00 10E	+12° 53	1-2	6.80	A0	6-6-6	"	400/200		FINE
		01 28W	+19° 25	2	1.3	K2 III p	10-10	R.V Std	40/30		SLIGHT FINE
		01 04W	+2° 05'	2	2.74	A0 V	10-10	Sp. Bin	40/18		FINE
		00H 55E	+10 17	2	4.30	[illegible] V	6-6-6	"	40/18		FINE
		00 32E	+38° 56'	2	V= 4.35	F2n	6-6-6	"	400/200		FINE
		01H 00E	+42° 12'	2	5.51	B6 V	6-6-6	"	200/100		
		00 45E	+58° 49'	2	4.85	A1 V	6-6-6	"	40/18		
		01H 40E	+33° 25'	2	6.66	B0.5 V	6-6-6	"	400/190		
		00H 20W	+01° 23		4.46	A1 V	6-6-6		40/17		FINE

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Date May 3/4 1971 wet Observer Bln/Rj Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34416	HD 141458	15 44.1	+13° 01'	"	"	"		03:55	04:21	B
34416F1	focus test	~~wet~~ wet/w.w		G-12	IIaO	9	40°F			B

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. .....

Transparency Conditions .....

Focus 96-R

Dome Temp. 36°F 65%

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	[illegible]	23:02W	+12°53'	3-4	6.80	A0	6-12	Sp. Bw. Bk.	400/100	Over develop plate	WEAK
	3						3-3	w filter			
										4 May 71	
										FOCUS CHANGED	
										FROM 96-R	
										TO 40-R	
										[illegible]	

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Date TUES/WED MAY 4/5 1971 **Observer** GZ - RI **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34417	HD 82191	09 25.4	+27 50	G12	BAKED 4H IIaO	13/0.5	50°F	20:03	20:27	A	
34418	HD 63630	07 44.8	+46 12	"	"	13/0.5	"	20:30	21:02	B	
34419	HD 105898	12 00.2	+25 19	"	"	13/0.3	50°F	21:08	22:18	A	
34420	HD 82191	09 25.4	+27 50	"	"	13/0.5	48°F	22:23	22:59	B	
34421	HD 153720	16 56.0	+75 34	"	"	13/0.5	47°F	23:10	00:18	A	
34422	HD 154528	17 00.9	+77 48	"	"	13/0.5	46°F	00:24	01:03	B	
34423	HD 172187	18 33.7	+43 08	"	"	13/0.5	45°F	01:12	01:46	A	
34424	HD 180316	19 11.0	+27 46	"	"	13/0.5	"	01:54	02:41	B	
34425	HD 153720	16 56.0	+75 34	"	BAKED 16H IIaO	13/0.5	44°F	02:50	03:55	A	
34426	HD 186547	19 37.9	+13 04	"	"	13/0.5	"	04:06	04:33	B	
34426F1	focus test	on card/in v		G12	Baked 16H IIaO	9	44°F			B	

Dome Temp. 42°F 48%

Focus 40-R

Dome Temp. 40°F 68%

Transparency Conditions SOME CLOUD → EXCELLENT

always PLEASE TAKE A FOCUS PLATE. (I'll think about it)

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		01"30W	+27 36	~1"	6.59	A0	6-6-6	SPEC-BIN.	400/150	plunger for focus tube was in way out V.	* SC STR
		03:44W	+46° 06'	1-2"	6.53	A3	6-6-6	"	400/200		* SC. STR
		0"41W	+24° 58	"	8.19	G2V	3-3-3 3-3-3	S.S.V.	800/300		* V. SC. STR
		4"03W	+27 35	"	6.59	A0	6-6-6	SPEC. BIN	400/200		* STR
		03"05E	+75 28	2-3"	6.84	F0	6-6-6	"	400/260	POOR SEEING	* STR
		01"25E	+77 43	"	6.66	A0	6-6-6	"	400/200		* (SC) STR
		02:17E	+43° 14'	1-2"	6.26	A5	6-6-6	"	400/200	SOME CLOUDS	SL. FOG STR
		02:00E	+27° 58	2-3"	6.69	B5	6-6-6	"	400/200		* STRONG
		01:34W	+75° 29'	"	6.84	F0	6-6-6	"	400/260	AT TIMES SEEING ~10"	SL. FOG SC. STR
		00:47E	+13 16	1-2"	6.1	B8II	6-6-6	"	400/30		* FINE
							3-3 no filter				GOOD
										* FOG	

Date Wed/Thurs May 5/6 1971 **Observer** P.T-T **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34427	HD 82191	09 25.4	+27 50	612	IIaO	13/.5	53°F	20:10	21:02	A	02 W
34428	HD93702	10 44.0	+11 04	"	"	"	"	21:09	21:37	B	01 W
34429	HD 110411	12 36.8	+10 47	"	"	"	"	21:50	22:10	A	00 W
34430	HD 130109	14 41.2	+2° 19	"	"	"	52°F	22:18	22:30	B	01 E
34431	HD 130841	14 45.4	-15° 38'	"	"	"	"	22:38	22:46	A	02 E
34431F	Focus						52°F			B	
34431T1	calibration step wedge for plates 34427 - 34431								6 Exp		

Dome Temp.
Focus
Dome Temp.

Dome Temp. 47°F H=67%

Transparency Conditions Hazy - Clouding in

Focus

Dome Temp. 45°F H=73%

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
12	A	02 10 W	+27° 36′	2-5"	6.59	A0	6-6-6	SPEC-BIN	400/200		SL. WK
-7	B	01 24 W	+10° 47′	2-3	5.29	A2V	6-6-6	Sp Bin-Bin	200/100		SL. WK
10	A	00 05 W	+10° 28′	1"-10"	4.97	A1V	6-6-6	"	200/100	seeing terrible	FINE
30	B	01 38 E	+2° 05′	3"-6"	3.74	A0V	6-6-6	"	200/95		FINE
46	A	03 27 E	——	5-10"	2.89	Am	10-10	"	200/90	Cloud by 23h	FINE
	B		in/out	out			3/3	no Filter			GOOD
		NGC 2/9.0 min @		65°F / 2 racks							

351 #1

Date Thurs/Fri May 6/7 1971 **Observer** Bln-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34432	HD 107325	12 15.3	+27 11	G-12	IIa-O	13/3	56°F	20:06	20:26	A	01.7E
34433	HD 77309	08 56.7	+54 41	"	"	13/5		20:31	20:45	B	2.2W
34434	HD 103482	11 49.9	+47 02	"	"	"		20:51	21:19	A	.. N
34435	HD 107325	12 15.3	+27 11	"	"	3/3		21:22	21:40	B	.. N
34436	HD 134897	14 11.1	+19 42	"	"	13/5		21:43	21:44	A	1.6E
34437	HD 141458	15 44.1	+13 01	"	"	"	55°F	21:50	22:40	B	2.2E
34438	HD 107325	12 15.3	+27 11	"	"	13/3		22:45	23:13	A	.. N
34439	HD 130109	14 41.2	+2 19	"	"	13/5		23:16	23:20	B	0.8E
34440	HD 124675	14 09.9	+52 15	"	"	"		23:26	23:32	A	0.0
34441	HD 134646	15 00.9	+63 30	"	"	"		23:35	00:53	B	0.2W
34442	HD 107325	12 15.3	+27 11	"	"	13/3	52°F	00:56	01:26	A	3.4W
34443	HD 159026	17 27.3	+38 57	"	"	13/5		01:31	02:13	B	.. 3E
34444	HD 152614	16 49.3	+10 20	"	"	"		02:18	02:22	A	1.0W
34445	HD 164577	17 56.7	+1 18	"	"	"		02:27	02:34	B	1.5E
34446	HD 177178	18 58.5	+1 40	"	"	"		02:38	03:06	A	1.5E
34447	HD 141458	15 44.1	+13 01	"	"	"		03:09	03:51	B	0.2W

Dome Temp. 49
Focus
Dome Temp.

Dome Temp. 49°F H=51%

Focus .....

Dome Temp. .....

Transparency Conditions Excellent

Cloudy looking Aurora

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		01 13 E	+26° 52'	1-2	V= 5.47	gK2	6-6-6	Sp. Bin-Bln	400/200		Fine
		.0223 W	+54 29	2-3	V= 5.64	A2n	6-6-6	"	100/100		Fine guiding
		00 05 W	+46 42	2	6.46	A0	6-6-6	"	400/200		Fine sl guiding
		00 01 W	+26 52	2	V=5.47	gK2	6-6-6	"	400/200		Fine
		01 50 E 02 40 E	+19 25	2	1.30	K2 III p	10-10	RV Std	40/28		Fine
		02 27 E	+12 52	"	6.90	A0	6-6-6	Sp. Bin-Bln	400/200		Fine
		01 35 W	+26 54	3-4	V=5.47	gK2	6-6-6	"	400/200		Fine
		00 44 E 00 16 E	+20 5'	2"	3.74	A5V	6-6-6	"	40/19		Fine
		00 00	+51 59	"	4.74	A7IV	6-6-6	"	40/19		Fine
		00 25 W	+63 17	3	V=6.75	F2	6-6-6	"	400/260		Fine
		03 48 W	+26 53	3-5	V=5.47	gK2	6-6-6	"	400/200		v sl weak
		00 35 E	+38 58	2-4'	V= 6.35	F2n	6-6-6	"	400/260		Fine sl guiding
		00 10 W	+10 18	2"-3"	4.30	B8V	6-6-6	"	40/19		Fine
		00 45 E 00 45 W	+ 1 23	3-8	4.46	A1V	6-6-6	"	40/18		Fine
		01 15 E	+ 1 52	4-5	5.68	A2	6-6-6	"	200/100		Fine
		02 45 W	+12 54	"	6.80	A2	6-6-6	"	400/200		Fine

#2

353

Cont.

Date Fri May 7 1971 **Observer** Blu-Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34448	HD 191610	20 05.7	+36 33	G-12	IIa-O	13/.5		03:55	04:01	A
34449	HD 198183	20 43.5	+36 07	"	"	"		04:03	04:07	B
34450	HD 161868	17 42.9	+7 45	"	"	"		04:10	04:14	A
34450F	Focus Test			"	"	13	49°F			B

Dome Temp.
Focus .017
Done Temp. 47

Hour Angle End

Dome Temp. ....

Focus 4 0R ~~5~~ ~~R~~

Dome Temp. 42° 50%

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 26E	+36°51′	2″	4.82	B2Ie	6-6-6	Sp. B.n	80/36		Fine 51 guiding
02 00E	+36°29′	"	4.42	B5I	6-6-6	"	80/37		Fine
0 09 W	+02 48	"	3.79	A0V	10-10	"	40/18		Fine
					3/3	no filter			

D.W. May 7 – 9.0 min @ 6 in n.w.r. 2

Date..... **Observer**..... **Julian Day**.....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
July 22/70	Ex. MTR. 5800 - open fil.			Pwr Sup. 2R (Pwr line surge)?						

Ending Time E.S.T.	P.H

357

HANDBOUND
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358

Pr 1. 20 Aut
36591
Pr 2. 4 Aut
3 Mon
Pr 3 40 Pet
16 Jan

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